



Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead



Richard J. Bruckner
Director

July 3, 2014

TO: SEATAC

FROM: Diane Aranda, Senior Regional Planner
Special Projects Section

**SUBJECT: HOMESTEAD SOUTH (NEWHALL RANCH PHASE III)
PROJECT NO. TR060678-(5)
VESTING TENTATIVE TRACT MAP NO. 060678
GENERAL PLAN AMENDMENT NO. 201400001
CONDITIONAL USE PERMIT CASE NO. 200500150
OAK TREE PERMIT CASE NO. 200500057
NEWHALL RANCH SPECIFIC PLAN SUBSTANTIAL CONFORMANCE
REVIEW NO. 201400004
ENVIRONMENTAL REVIEW NO. 200500150
AGENDA ITEM NO. (TBD)**

At the June 2, 2014 SEATAC meeting, SEATAC concluded that further explanation be provided regarding 1) how the transboundary processes, such as those related to Argentine ants, unauthorized animal control (e.g. coyote) and predation by roaming pets, will be mitigated and enforced during post project approval; 2) assurances that the CC&R compliances, monitoring and funding and adaptive management are sufficiently substantiated, including monitoring to track the effectiveness of environmental education in the CC&R; 3) provide details for the funding endowments for open space management; 4) illustrate State and Federal nuisance water management requirements as pertaining to the Newhall Ranch Specific Plan; 5) clarification of the term "non-jurisdictional" riparian areas as it is used in the Comprehensive Mitigation Implementation Plan (CMIP); and 6) using an alternative term to "good genetic stock" that better describes native, locally indigenous plant material. In response to the above-mentioned comments, the applicant, Newhall Ranch and Farming, prepared an addendum to the SEATAC **Biota Report Requirements Road Map (BRRRM)** dated July 2014 (attached).

Regarding mitigation for transboundary processes, BRRRM cites mitigation measures listed in the Draft Biological Technical Report (BTR) dated March 2014, such as temporary and permanent fencing during construction, restricting access to Special Management areas and an Integrated Pest Management Plan, which are proposed to reduce short and long term indirect impacts. There are also additional sections cited to address indirect impacts to vegetation communities, special status plant species, wildlife habitat and specific effects of Argentine ants. The BRRRM addresses the post-project approval enforcement comment by listing the following as the responsible agencies: County of Los Angeles; California Department of Fish and Wildlife (CDFW); and the open space Preserve Manager.

Regarding assurance of CC&Rs compliance and monitoring, the CC&Rs will assure compliance with mitigation measures in the Homestead South BTR and EIR and monitoring will be conducted by the County, CDFW and the Army Corps. Monitoring will also be conducted by a

designated Preserve Task Manager who is tasked with Annual Public Outreach and disseminates information to the homeowners and the community.

In regards to funding obligations and endowments for assuring monitoring and management, a Property Analysis Records (PAR) was prepared by CDFW that addressed the Newhall Ranch River Corridor (including Middle Canyon), High Country, Salt Creek area, Spineflower Preserves and other open spaces. Funding is also a requirement of the **Resource Management and Development Plan (RMDP)** and **Spineflower Conservation Plan (SCP)**, and is also a requirement of permits issued by CDFW and the Army Corps. Furthermore, the adaptive management requirements are outlined in Chapter 10 (page 142) of the SCP and Chapter 10 (page 299) of the RMDP.

SEATAC's comments regarding details on funding of endowments for open space management are addressed with the preparation of the previously mentioned Property Analysis Records. With guidance from CDFW, the PAR determined appropriate establishment costs and funding amounts (approximately \$12 million of phased funding) to ensure the required long-term management and monitoring.

Appendix 4.4 Water Quality section of the RMDP/SCP EIS/EIR, addresses comments regarding a request for details of State and Federal nuisance water management requirements in relation to the Newhall Ranch Specific Plan. In addition, the BRRRM lists project design features (PDF) that will minimize the potential generation of dry weather discharge.

Appendix A of the **Comprehensive Mitigation Implementation Plan (CMIP)** for the Newhall Ranch RMDP and SCP uses the term "non-jurisdictional" riparian areas as riparian vegetation communities that occur on terraces above jurisdictional streams and creeks as considered non-jurisdictional by the Corps and CDFW and are associated with mitigation ratio of 1:1 to be consistent with the Newhall Ranch RMDP/SCP.

Lastly, the phrase "good genetic stock" was used in the Specific Plan EIR, and as a result, was used in the Draft BTR. The phrase "good genetic stock" as used in the BTR (SP-4.6-5) implies that plant material will be locally indigenous, consistent with subsequent mitigation language and terminology. Subsequent mitigation measures use locally indigenous plant materials.

County staff has determined that the SEATAC BRRRM prepared by PCR (dated July 2014) and the previously submitted BTR provide the necessary information to support staff's determination.

Updated materials provided for SEATAC review include the addendum to the **June 2, 2014 SEATAC Biota Report Requirements Road Map** and excerpts of the RMDP/SCP EIS/EIR referenced in the above-mentioned report.

SZD:DA
7/3/14

SEATAC BIOTA REPORT REQUIREMENTS ROAD MAP

Addendum: Responses to June 2, 2014 SEATAC Comments

COUNTY PROJECT TR060678

Tentative Tract Map TR060678, General Plan Amendment No. 201400001,
Conditional Use Permit No. 200500150, Oak Tree Permit No. 200500057,
Newhall Ranch Specific Plan Substantial Conformance Review No. 201400004,
Environmental Review No. 200500150

VALENCIA, CALIFORNIA

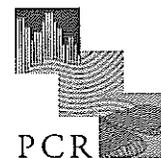
Prepared For:

The Newhall Land and Farming Company
25124 Springfield Court, Suite 300
Valencia, California 91355
Contact: Corey Harpole

Prepared By:

PCR Services Corporation
One Venture, Suite 150
Irvine, California 92618
Contact: Daryl Koutnik, Principal, Biological and Environmental Compliance

July 2014



Introduction

The Homestead South project incorporates the same or more comprehensive mitigation measures and project design features as the previously approved phases of the NRSP, Landmark Village and Mission Village. The two earlier approved projects were found to be consistent with the SEA design compatibility criteria. Because the Homestead South project will implement the enhanced mitigation measures developed through the State and Federal RMDP/SCP EIS/EIR, in addition to the comparable mitigation measures required of Landmark Village and Mission Village, the project may be considered to be consistent with the SEA design compatibility criteria, as detailed in the April 2014 SEATAC Biota Report Requirements Road Map (beginning on page 14).

The Homestead South project (County Project TR060678), the third phase of entitlement of the Newhall Ranch Specific Plan (NRSP), was presented for SEATAC review at the January 13, 2014 SEATAC meeting and again at the June 2, 2014 SEATAC meeting. At the January 2014 meeting, the project applicant presented details of the project description and the processing background of the NRSP, Landmark Village, Mission Village and the Resource Management and Development Plan/Spineflower Conservation Plan. In addition, the presentation reviewed the previous NRSP project SEATAC reviews and concluded that the only portion of the Homestead South project site within the SEA not previously reviewed by SEATAC were two areas. Those two areas were within the revised SEA boundary of the Santa Clara River SEA that was recently changed with the adoption of the Santa Clarita Valley Area Plan. The 2013 Biological Resources Synopsis for the Homestead South Site (prepared for SEATAC discussion) prepared December 2013 by Dudek was provided for the January 2014 meeting.

At the June 2014 meeting, the project applicant provided the following for documents for Homestead South discussion:

- Draft Biological Technical Report for the Homestead South Site and Associated Off-Site Improvement Areas, Los Angeles County, California prepared March 2014 by Dudek
- Biological Resources Synopsis for the Homestead South Site (prepared for SEATAC discussion) prepared March 2014 by Dudek
- Draft Comprehensive Mitigation Implementation Plan for the Newhall Ranch – Resource Management and Development Plan and Spineflower Conservation Plan Study Area prepared May 2014 by Dudek
- SEATAC Biota Report Requirements Road Map prepared April 2014 by PCR

The applicant responded to the SEATAC comments from the January meeting regarding rationale of which species were included in the impact analysis for the project and mitigation accounting for evaluating the sufficiency of mitigation areas within the

NRSP to balance impacts with required mitigation needs for all phases. The applicant's presentation included details on the mitigation locations within the NRSP for the Homestead South impacts. Lastly, the applicant reviewed the SEA compatibility criteria and provided discussion in how the Homestead South project would meet those criteria in context with the Santa Clara River SEA.

This Addendum to the previously submitted SEATAC Biota Report Requirements Road Map document is prepared to specifically respond to the SEATAC comments of the June 2, 2014 meeting, such as transboundary development (edge) effects, adaptive management and community/homeowner environmental education, and information regarding open space area endowments for resource management and enhancement in-perpetuity.

SEATAC Comments & Motions:

Comments and Responses:

1. The project documentation does not adequately address how transboundary processes, such as those relating to Argentine ants, un-authorized animal control (e.g. coyote), predation by roaming pets, etc. will be mitigated and enforced post-project approval.

Response: See the Homestead South Draft Biological Resources Technical Report (BTR; Dudek, March 2014) in Section 5.3.2, Indirect Impacts to Vegetation Communities and Land Covers (page 225); Section 5.4.2, Indirect Impacts on Special-Status Plants (page 253); and Section 5.5.2, Indirect Impacts to Special-Status Wildlife (page 357).

As described in the Draft BTR, increases in human activity along the open space–urban interface (also referred to as “edge areas”) and within open space areas (e.g., use of trails within and adjacent to the Santa Clara River SMA, High Country SMA, and Salt Creek area) may result in indirect effects or transboundary processes. The BTR includes a comprehensive mitigation program to address transboundary effects in the spineflower, Santa Clara River, and other permanently preserved open space areas within the project area. These effects, and mitigation measures to address them, are outlined in greater detail below.

Short-term construction effects to vegetation communities and special-status plant species may include fugitive dust; runoff, sedimentation, chemical pollution, and erosion; litter; and accidental clearing, grading, and trampling. Excessive dust from short-term construction can decrease or limit plant survivorship by decreasing photosynthetic output, reducing transpiration, and adversely affecting reproductive success. Construction or other infrastructure upgrades including mass grading can severely or permanently alter the surface hydrology in an area and affect plant communities by reducing access to sheet flow during rain events or increasing the chance of erosion. Operation and maintenance of construction equipment can increase the chance of petroleum or other chemical spills or leaks (e.g., fuels, lubricants, cleaning solutions) that can enter off-site vegetation. Vegetation can also be crushed through the inadvertent clearing of vegetation located outside the designated Project footprint.

Long-term indirect effects on vegetation communities and special-status plants include trampling of vegetation and compaction of soils; fertilizers and herbicide penetration through runoff and overspray; increased urban and stormwater runoff from impervious surfaces, such as roads or structures. Increased moisture associated with irrigation and runoff can attract invasive Argentine ants, which could displace native ants that are known pollinators of spineflower and potentially seed dispersers. Invasive plant species that thrive in edge habitats can degrade habitat by displacing native communities. Urbanization also alters wildfire regimes as a result of human activities at the open

space–urban interface, such as accidental ignitions from sparks from equipment, such as mowers striking rocks, cigarettes, children playing with matches, and intentional ignitions, such as arson.

Indirect impacts to vegetation communities would be reduced to less than significant by the following proposed Homestead South mitigation measures (contained in the Draft BTR Section 6.2, Additional Mitigation Measures Proposed by This BTR; page 443):

- **HS-9** and **HS-10** (control invasive exotic plant species)
- **HS-19** (protective fencing around oaks during clearing and grading activities)
- **HS-20** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities)
- **HS-22** (trail signage and homeowner education regarding sensitive resources in preserved natural habitat areas)
- **HS-23** (permanent fencing along trails in the River Corridor SMA)
- **HS-28** (guidelines for restoration and enhancement of degraded and/or damaged spineflower habitat)
- **HS-29** (emergency fire response plan and response strategies for wildfire or mass movement (e.g., landslides, slope sloughing, or other geologic events) within the spineflower preserves)
- **HS-30**, **HS-31**, and **HS-32** (spineflower preserve temporary fencing requirements, construction documents and education of construction workers)
- **HS-34** (review of plant palettes used within 200 feet of spineflower preserves and inspection of all container plants within 200 feet for disease and pests)
- **HS-35** through **HS-37** (restricting access to spineflower preserves through fencing and signage)
- **HS-38** and **HS-39** (restrictions on storm drains within spineflower preserves)
- **HS-42** (slow moving water habitats shall be constructed upstream and downstream of any river crossing or bridge construction area)
- **HS-43** (prevention of mud and pollutants from entering streams and storm flows)
- **HS-44** (Integrated Pest Management plan)
- **HS-45** (Project design features, construction notes, erosion and dust control, and stormwater pollution prevention plan (SWPPP) best management practices (BMPs) to ensure protection of vegetation communities and special-status species)

- **HS-46** (control measures to protect vegetation communities and special-status aquatic wildlife species)
- **HS-47** (review of plant palettes and inspection of container plants for use within 200 feet of native vegetation for pests and disease; restrictions on invasive plants and irrigation)
- **HS-48, HS-49, and HS-50** (control of construction-related dust, erosion, and water quality within spineflower preserve).

In addition to the proposed Homestead South mitigation measures, the following required Newhall Ranch Specific Plan (NRSP) mitigation measures address indirect impacts to vegetation communities and transboundary processes:

- **SP-4.6-7** (revegetation plans for the River Corridor SMA to include guidelines for maintenance of the mitigation site during plant establishment)
- **SP-4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA)
- **SP-4.6-18** and **SP-4.6-19** (transition areas along the River Corridor SMA)
- **SP-4.6-20** (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA)
- **SP-4.6-26** (plan for ownership, financing, and management of the River Corridor SMA/SEA)
- **SP-4.6-26a** (riparian revegetation and oak tree replacement opportunities in the High Country SMA)
- **SP-4.6-29** through **SP-4.6-32** (recreational usage and access restrictions within the High Country SMA)
- **SP-4.6-33** (protection of transition areas along the High Country SMA, including planting palettes and FMZs)
- **SP-4.6-34** and **SP-4.6-35** (guidelines for grading activities in the High Country SMA)
- **SP-4.6-39** (High Country SMA grazing and recreational use restrictions)
- **SP-4.6-43** (Open Area use for mitigation of riparian or oak resources or elderberry scrub)
- **SP-4.6-44** and **SP-4.6-45** (drainage guidelines)
- **SP-4.6-49** through **SP-4.6-52** (wildfire fuel modification plan and standards for FMZs)

- **SP-4.6-58** (National Pollutant Discharge Elimination System (NPDES) permits and water quality permits)
- **SP-4.6-67** (open space connections and setbacks for spineflower preserves; prohibition of disturbance within spineflower preserves or buffers; revegetation requirements)
- **SP-4.6-68** (temporary fencing and signage around the spineflower preserve(s), open space connections, and buffer areas; permanent fencing and signage along the spineflower preserve boundary)
- **SP-4.6-69** (storm drain system requirements for spineflower preserve areas)
- **SP-4.6-72** (fire management plan to avoid and minimize impacts to the spineflower)
- **SP-4.6-73** (minimization of changes in surface water flows to spineflower preserves)

Indirect impacts to special-status plant species would be reduced to less than significant by the following proposed mitigation measures (please refer to Draft BTR, Section 6.2), many specific to protection of the San Fernando Valley spineflower:

- **HS-20** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities, and restriction on construction night lighting within 200 feet of natural areas)
- **HS-28** (guidelines for restoration and enhancement of degraded and/or damaged spineflower habitat)
- **HS-29** (emergency fire response plan and response strategies for wildfire or mass movement (e.g., landslides, slope sloughing, or other geologic events) within the spineflower preserves)
- **HS-30** through **HS-33** and **HS-50** (spineflower preserve temporary fencing requirements and education of construction workers)
- **HS-30**, **HS-33**, and **HS-48** through **HS-50** (control of construction-related dust, erosion, and water quality within spineflower preserve, and quarterly monitoring for Argentine ants along the construction–open space interface)
- **HS-34** (review of plant palettes used within 200 feet of spineflower preserves and inspection of all container plants within 200 feet for disease and pests)
- **HS-35** through **HS-37** (restricting access to spineflower preserves through fencing and signage)

- **HS-38** and **HS-39** (restrictions on storm drains within spineflower preserves)
- **HS-51** and **HS-52** (Spineflower Conservation Plan spineflower preserve establishment and management)
- **HS-57** (prevention of Argentine ant invasion).

The following required NRSP mitigation measures also address indirect impacts to special-status plant species:

- **SP-4.6-53** (updated site-specific surveys for rare, threatened, or endangered plant or animal species at County request)
- **SP-4.6-65** (requiring subdivision maps responsive to spineflower characteristics)
- **SP-4.6-66** (road construction requirements to reduce or avoid impacts to spineflower)
- **SP-4.6-67** (open space connections and setbacks for spineflower preserves; prohibition of disturbance within spineflower preserves or buffers; revegetation requirements)
- **SP-4.6-68** (temporary fencing and signage around the spineflower preserve(s), open space connections, and buffer areas; permanent fencing and signage along the spineflower preserve boundary)
- **SP-4.6-69** (storm drain system requirements for spineflower preserve areas)
- **SP-4.6-70** (road construction requirements to reduce or avoid impacts to spineflower)
- **SP-4.6-71** (engineering, design, and grading modifications around spineflower preserves)
- **SP-4.6-72** (fire management plan to avoid and minimize impacts to the spineflower)
- **SP-4.6-73** (minimization of changes in surface water flows to spineflower preserves)
- **SP-4.6-74** (biweekly biological monitoring of grading and fence/utility installation activities; submission of monthly monitoring reports)
- **SP-4.6-75** (water control and stormwater flow redirection during construction activities)
- **SP-4.6-76** (reassessment of impacts to spineflower populations)

- **SP-4.6-77** (spineflower monitoring and management plan)
- **SP-4.6-78** (spineflower translocation and reintroduction program)

Short-term and long-term indirect impacts to wildlife habitat are similar to those described above for vegetation communities and special-status plant species.

Short-term construction-related indirect impacts to special-status wildlife species generally include noise, vibration, lighting, increased human activity, hydrologic and water quality (e.g., chemical pollution, increased turbidity, excessive sedimentation, flow interruptions, and changes in water temperature), and trash and garbage, which can attract predators such as crows, ravens, and coyotes, and mesopredators such as raccoons and striped skunks.

Long-term development-related indirect impacts to special-status wildlife species generally include noise, lighting, increased predation or harassment by pet, stray, and feral cats and dogs as well as other mesopredators, invasion by exotic wildlife species (e.g., Argentine ants), pesticide use, altered fire regimes, and increased road kill.

Indirect impacts to special-status wildlife species would be reduced to less than significant by the following proposed mitigation measures for the Homestead South project:

- **HS-9 and HS-10** (control invasive exotic plant species)
- **HS-19** (protective fencing around oaks during clearing and grading activities)
- **HS-20** (pre-construction educational meetings, construction-limit staking, and biological monitoring during vegetation clearing and grading activities)
- **HS-22** (trail signage and homeowner education regarding sensitive resources in preserved natural habitat areas)
- **HS-23** (permanent fencing along trails in the River Corridor SMA)
- **HS-28** (guidelines for restoration and enhancement of degraded and/or damaged spineflower habitat)
- **HS-29** (emergency fire response plan and response strategies for wildfire or mass movement (e.g., landslides, slope sloughing, or other geologic events) within the spineflower preserves)
- **HS-30, HS-31, and HS-32** (spineflower preserve temporary fencing requirements, construction documents and education of construction workers)
- **HS-34** (review of plant palettes used within 200 feet of spineflower preserves and inspection of all container plants within 200 feet for disease and pests)
- **HS-35 through HS-37** (restricting access to spineflower preserves through fencing and signage)

- **HS-38** and **HS-39** (restrictions on storm drains within spineflower preserves)
- **HS-43** (prevention of mud and pollutants from entering streams and storm flows)
- **HS-44** (Integrated Pest Management plan)
- **HS-45** (Project design features, construction notes, erosion and dust control, and stormwater pollution prevention plan (SWPPP) best management practices (BMPs) to ensure protection of vegetation communities and special-status species)
- **HS-47** (review of plant palettes and inspection of container plants for use within 200 feet of native vegetation for pests and disease; restrictions on invasive plants and irrigation)
- **HS-48**, **HS-49**, and **HS-50** (control of construction-related dust, erosion, and water quality within spineflower preserve).

The required NRSP mitigation measures addressing indirect impacts to special-status wildlife species include the following:

- **SP 4.6-7** (revegetation plans for the River Corridor SMA to include guidelines for maintenance of the mitigation site during plant establishment)
- **SP-4.6-17** (standards for trail design and limitations on human and pet access to the River Corridor SMA)
- **SP-4.6-18** and **SP-4.6-19** (transition areas along the River Corridor SMA)
- **SP-4.6-20** (marking and inspection of grading perimeters; avoiding inadvertent impacts to riparian resources in the River Corridor SMA)
- **SP-4.6-26** (plan for ownership, financing, and management of the River Corridor SMA/SEA)
- **SP 4.6 26a** (riparian revegetation and oak tree replacement opportunities in the High Country SMA)
- **SP-4.6-29** through **SP-4.6-32** (recreational usage and access restrictions within the High Country SMA)
- **SP-4.6-33** (protection of transition areas along the High Country SMA, including planting palettes and FMZs)
- **SP-4.6-34** and **SP-4.6-35** (guidelines for grading activities in the High Country SMA)
- **SP-4.6-39** (High Country SMA grazing and recreational use restrictions)

- **SP-4.6-43** (Open Area use for mitigation of riparian or oak resources or elderberry scrub)
- **SP-4.6-44** and **SP-4.6-45** (drainage guidelines)
- **SP-4.6-49** through **SP-4.6-52** (wildfire fuel modification plan and standards for FMZs)
- **SP-4.6-58** (National Pollutant Discharge Elimination System (NPDES) permits and water quality permits)
- **SP-4.6-67** (open space connections and setbacks for spineflower preserves; prohibition of disturbance within spineflower preserves or buffers; revegetation requirements)
- **SP-4.6-68** (temporary fencing and signage around the spineflower preserve(s), open space connections, and buffer areas; permanent fencing and signage along the spineflower preserve boundary)
- **SP-4.6-69** (storm drain system requirements for spineflower preserve areas)
- **SP-4.6-72** (fire management plan to avoid and minimize impacts to the spineflower)
- **SP-4.6-73** (minimization of changes in surface water flows to spineflower preserves)

The specific effects of Argentine ants are addressed within the Draft BTR in Section 5.4.2, Indirect Impacts on Special-Status Plants, under Impact BIO-14 (page 254); and Section 5.5.2, Indirect Impacts to Special-Status Wildlife, under Impacts BIO-71 through BIO-73, BIO-75, BIO-76, BIO-79, and BIO-83 (pages 363 through 403).

These potential impacts resulting from the presence of Argentine ants would be reduced to less than significant by the following proposed mitigation measures, each of which is consistent with and implements the Spineflower Conservation Plan (SCP) adopted by the CDFW:

- **HS-30**, **HS-33**, and **HS-48** through **HS-50** minimize construction-related impacts in spineflower preserves by requiring “environmental education sessions,” incorporating dust control, erosion control, and water quality plans (as required in the Project SWPPP) into construction plans. In addition, these mitigation measures require weekly construction monitoring for all construction activities within 200 feet of spineflower preserve areas and quarterly monitoring for Argentine ants along the construction–open space interface
- **HS-34** requires plant palettes proposed for use within 100 feet of a spineflower preserve to be reviewed by the spineflower preserve manager or qualified biologist to ensure that the proposed plants will not naturalize and require maintenance or cause vegetation community degradation. Container plants to be

installed within 200 feet of the spineflower preserves will be inspected by the spineflower preserve manager or qualified biologist for the presence of disease, weeds, and pests, including Argentine ants.

- **HS-38** and **HS-39** specify storm drain requirements and limitations within spineflower preserve areas in order to retain pre-construction hydrological conditions within spineflower preserves, and require that any surface water entering a spineflower preserve from the development areas pass through BMP measures as described in the SWPPP
- **HS-57** requires controls to be implemented using an integrated pest management (IPM) approach in accordance with the approved SCP to preclude the invasion of Argentine ants into the spineflower preserves and their associated buffers.

With respect to animal control and predation by roaming pets, these are addressed within the Draft BTR in Section 5.5.2, Indirect Impacts to Special-Status Wildlife under Impact BIO-70, BIO-73, BIO-76, BIO-79 (pages 362 through 380).

- **HS-79** requires education of residents with respect to pets, wildlife and open space areas, and the control of pet, stray, and feral cats and dogs in or near open space areas. Each tract map HOA will supply educational information to residents discussing the presence of native animals (e.g., coyote, bobcat, and mountain lion), indicating that those native animals could prey on pets and that no actions will be taken against native animals should they prey on pets.

Post-project approval enforcement of the mitigation measures will primarily be the responsibility of both the County of Los Angeles and the CDFW, as dual lead agencies. All of the major natural open space areas (Spineflower preserves, High Country SMA, Santa Clara River SMA, Salt Creek and other conservation areas) will have habitat conservation easements dedicated to CDFW with endowment funding and specific management programs to address post project trans-boundary effects in perpetuity. The open space Preserve Manager (Center for Natural Land Management) is obligated under the Conservation Easement and its fiduciary responsibility to carry out those activities in its capacity as the endowment holder. Therefore, those open space areas do not require any additional mitigation enforcement.

In addition, a natural lands management organization (NLMO – Center for Natural Land Management), approved by CDFW, will assume responsibility for the implementation of certain mitigation measures, including the following:

- **HS-21** requires dedication to the public of a minimum of 304 acres of Open Area to an NLMO.
- **HS-22** requires the NLMO and the Newhall Ranch Joint Powers Authority to develop and implement a conservation education and citizen awareness program for the High Country SMA.
- **HS-52** requires the NLMO to manage the spineflower preserves in conjunction with Newhall Land, which will fund the management efforts.

2. Assurances for CC&R compliance, monitoring, funding, and adaptive management are not sufficiently substantiated. Include monitoring to track the effectiveness of environmental education in the CC&Rs as a mitigation measure.

Response: Funding of the mitigation measures of the Homestead South BTR and EIR is a requirement of the Resource Management and Development Plan/Spineflower Conservation Plan (RMDP/SCP) EIS/EIR¹ and permits issued by CDFG² and the Corps. As described in an internal CDFG memo dated July 1, 2011, CDFG conducted an independent review of the 7 Property Analysis Records (PARs) prepared for Newhall Land. The PARs have been incorporated into the following final permits and approvals: Newhall Land Spineflower Incidental Take Permit (ITP), Newhall Ranch RMDP Master Streambed Alteration Agreement (MSAA) and ITP and the RMDP/SCP EIS/EIR Mitigation Monitoring and Reporting Plan (MMRP). The PARs address funding obligations and endowments for monitoring and management of the Newhall Ranch River Corridor (including Middle Canyon Spring), High Country, Salt Creek area, Spineflower preserves and other Open Space.

As outlined in the PARs, the Preserve Manager is tasked with Annual Public Outreach, including coordination with Homeowners Association (HOAs). The Preserve Manager and HOAs will ensure dissemination of environmental education information to the adjacent homeowners and community.

CC&R compliance with the mitigation measures in the Homestead South BTR and EIR will be enforceable by the County and CDFW and the Corps.

Adaptive management requirements are outlined in Chapter 10 of the SCP (page 142) and Chapter 10 of the RMDP (page 299), and are also a requirement of the CDFG and Corps permits.

The proposed Homestead South mitigation measures incorporating funding for implementation include the following:

- **HS-24** requires funding an endowment for the monitoring of the effectiveness of the Wildlife Species Control Plan.
- **HS-51** requires funding for in perpetuity protection of the spineflower preserve lands.
- **HS-52** requires funding for the management of the spineflower preserve lands.
- **HS-80** requires funding an endowment for the monitoring of the effectiveness of the control of Argentine ants.

¹ “To ensure monitoring consistent with CEQA, the applicant has further agreed to fund the monitoring of all the non-biological mitigation measures identified in the EIS/EIR through the Department’s environmental consultant for the Project (Aspen Environmental Group).” EIS/EIR Mitigation Monitoring and Reporting Plan for the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan as required by the California Department of Fish and Game. December 2010.

² The California Department of Fish and Game (CDFG) was officially renamed the California Department of Fish and Wildlife (CDFW) as of January 1, 2013. Where references are made in this document to the agency for background information, documents, permits, consultations, etc. prior to January 1, 2013, the title “CDFG” is used and for references after January 1, 2013, “CDFW” is used.

3. Provide details on the funding of endowments for open space management.

Response: With direction and review by the CDFW, Newhall and its consultant prepared comprehensive Property Analysis Reports to determine appropriate upfront preserve establishment costs and endowment funding amounts to ensure the required long-term management and monitoring required under the CDFW RMDP/SCP mitigation program.

The 7 PARs described in response to item 2 above include

- a. Newhall Land Spineflower Phase 1 (SCP ITP)
- b. Newhall Land Spineflower Phase 2 (SCP ITP)
- c. Newhall Land Spineflower Phase 3 (SCP ITP)
- d. Ahmanson Spineflower (SCP ITP)
- e. Newhall Ranch Middle Canyon Spring (RMDP MSAA)
- f. Newhall Ranch River Corridor (RMDP MSAA & MS ITP)
- g. Newhall Ranch Open Space – High Country, Salt Creek area, and other Open Space (EIS/EIR MMRP)

The endowments quantified in the PARs totals approximately \$12 million of phased funding by Newhall over the course of the project. The PARs were developed to address the entirety of the RMDP and SCP permit and open space management requirements, and include both upfront costs associated with establishing the preserve system (e.g., fencing, signs, seed collection, etc.) as well as long-term monitoring and management costs in perpetuity (e.g., exotic species control, community outreach, species monitoring, feral animal control, etc.).

4. Provide details of state and federal agency nuisance water management requirements as they pertain to the NRSP.

Response: As described in Appendix 4.4 Water Quality of the RMDP/SCP EIS/EIR³, no dry weather discharge will occur within the Santa Clara River or its tributaries, and because all dry weather flows will be infiltrated or evapotranspired, there will be no change to seasonality of flow or water quality.

The following project design features (PDFs) will minimize the potential generation of dry weather discharge:

- landscaping in public and common areas will utilize drought tolerant vegetation that requires little watering and chemical application
- landscape watering in common areas, commercial areas, multiple family residential areas, and in parks will use efficient irrigation technology utilizing evapotranspiration sensors to minimize excess watering
- educational programs and distribution of materials (source controls) will emphasize appropriate car washing locations (at commercial car washing facilities or the car wash pad in the multi-family residential areas) and techniques (minimizing usage of soap and water), encourage low impact landscaping and appropriate watering techniques, appropriate swimming pool dechlorination and discharge procedures, and discourage driveway and sidewalk washing
- illegal dumping will be discouraged by stenciling storm drain inlets and posting signs that illustrate the connection between the storm drain system and the receiving waters and natural systems downstream
- bioretention areas, vegetated swales, and the extended detention basins will provide treatment for and infiltrate dry weather flows and small storm events

These PDFs will infiltrate or evapotranspire all expected dry weather runoff. No dry weather discharge will occur to the Santa Clara River or tributaries, with the exception that treated dry weather flows may be directed to support mitigation habitat adjacent to the tributaries if desired.

The RWQCB WDR and the County MS4 program prohibit unauthorized non-storm water discharges into the MS4 system, the Santa Clara River, or other waters of the State.

³ Geosyntec Consultants. Newhall Land Specific Plan Sub-Regional Stormwater Mitigation Plan. Prepared for the Los Angeles County Department of Public Works. April 2008

5. Clarify what is meant by the term "non-jurisdictional" riparian areas as it is used in the documents.

Response: As described in Section 3.2.1 of the BTR (page 52), the project site includes transitional riparian vegetation communities such as big sagebrush scrub, blue elderberry stands, and mulefat scrub that can occur both within and outside the jurisdictional limits of streams and creeks. Where these riparian vegetation communities occur on terraces above the jurisdictional streams and creeks they are not considered to be jurisdictional by the Corps and CDFW. The category non-jurisdictional riparian areas used in Appendix A of the Comprehensive Mitigation Implementation Plan (CMIP) for the Newhall Ranch RMDP and SCP (Dudek, May 2014) reflects these transitional riparian vegetation communities that occur outside jurisdictional limits, and these are associated with a mitigation ratio of 1:1 consistent with the Newhall Ranch RMDP/SCP EIS/EIR.

6. "Good genetic stock" is an odd choice of words. Use an alternative.

Response: The phrase "good genetic stock" is used only in NRSP mitigation measure SP-4.6-5 (BTR page 416). Although this term was adopted in the past, subsequent language uses different terminology. For example, HS-1 (page 443) requires that source plant materials for wetlands restoration sites be native to the region and HS-26 (page 458) requires that source plant materials for coastal scrub restoration be collected from within five miles of the restoration site.

While the wording of a Specific Plan EIR mitigation measure cannot be changed, we do note that SP-4.6-5 requires that plant materials used for restoration of riparian habitats within the River Corridor SMA must be native to the Santa Clara River and either gathered from the River Corridor SMA or purchased from a nursery with local supplies. Thus, the phrase good genetic stock as used in SP-4.6-5 implies that plant material will be locally indigenous, consistent with subsequent mitigation language and terminology (as in HS-1 and HS-26 above).

Conclusion

The Homestead South project will incorporate the same or more comprehensive mitigation measures and project design features as the previously approved phases of the NRSP, Landmark Village and Mission Village. The two earlier approved projects were found to be consistent with the SEA design compatibility criteria. Because the Homestead South project will implement the enhanced mitigation measures developed through the State and Federal RMDP/SCP EIS/EIR, in addition to the comparable mitigation measures required of Landmark Village and Mission Village, the project may be considered to be consistent with the SEA design compatibility criteria, as detailed in the April 2014 SEATAC Biota Report Requirements Road Map (beginning on page 14).

Homestead South would not result in any impacts to the SEA outside of the SEA impacts already analyzed for the Landmark Village and Mission Village CUPs and would be highly compatible with the biotic resources present in the Santa Clara River SEA. Development of the Homestead South project within portions of SEA 23 would maintain water bodies, watercourse and their tributaries in a natural state, consistent with the Newhall Ranch Specific Plan and associated CUP 94-087. The Homestead South project will set aside appropriate and sufficient undisturbed areas, will retain wildlife movement corridors in a natural and undisturbed condition within the Santa Clara River SEA, will retain sufficient natural vegetative cover and open spaces to buffer critical resources within the existing SEA from the proposed development, will provide fences or walls where necessary to buffer important habitat within existing SEA 23 from proposed development, and has designed roads and utilities serving the development so as not to conflict with critical resources, habitat areas, or migratory paths within the existing Santa Clara River SEA.

ATTACHMENT 1

CALIFORNIA DEPARTMENT OF FISH AND GAME
REVIEW OF PROPERTY ANALYSIS REPORT FOR THE
NEWHALL RANCH RESOURCE MANAGEMENT AND
DEVELOPMENT PLAN AND SPINEFLOWER
CONSERVATION PLAN, JULY 1, 2011

Memorandum

Date: July 1, 2011

To: Ed Pert
Regional Manager
South Coast Region, Department of Fish and Game

From: Betty Courtney 
Senior Environmental Scientist
HabCon North, SCR, Department of Fish and Game

Subject: California Department of Fish and Game Review of Property Analysis Reports for the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan

This memorandum summarizes the California Department of Fish and Game's (Department) review and concurrence with the seven Property Analysis Records (PARs) for the long-term enhancement and stewardship responsibilities associated with implementation of the Newhall Ranch Resource Management and Development Plan (RMDP) and Spineflower Conservation Plan (SCP). The PARs were discussed in detail with Newhall Land and its consultant, Dudek, who prepared the PARs on Newhall's behalf at the Department's direction. The Department reviewed and revised the PARs throughout 2010, until they were finalized with issuance of the Department's related permits and approvals on December 3, 2010. The Department's December 2010 approvals include the following: 1) The SCP Incidental Take Permit (SCP ITP); 2) RMDP Multi-species ITP (RMDP MS ITP); 3) RMDP Master Streambed Alteration Agreement (RMDP MSAA); and 4) additional CEQA mitigation outlined in the EIS/EIR Mitigation Monitoring and Reporting Plan (EIS/EIR MMRP). Numerous modifications of the PARs evolved from the Department's review, particularly in October and November 2010. The seven PARs considered by the Department that have been incorporated into the final permits and approvals include:

- Newhall Land Spineflower Phase 1 (SCP ITP)
- Newhall Land Spineflower Phase 2 (SCP ITP)
- Newhall Land Spineflower Phase 3 (SCP ITP)
- Ahmanson Spineflower (SCP ITP)
- Newhall Ranch Middle Canyon Spring (RMDP MSAA)
- Newhall Ranch River Corridor (RMDP MSAA & MS ITP)
- Newhall Ranch Open Space – High Country, Salt Creek, and Other Open Space (EIS/EIR MMRP)

On December 2, 2010, the Department concluded its review and approved the seven PARs at that time (pers. comm. to M. Carpenter, December 2, 2010). The values derived for the PARs are reflected in the Department's MSAA and two ITPs. In addition, the Newhall Ranch Open Space PAR was approved by the Department for the long-term enhancement and management of both riparian and upland resources within those areas as required for CEQA compliance in the EIS/EIR MMRP. All of the PARs, except for the Ahmanson Spineflower PAR, were calculated using endowments earnings per year percentage of 4.5% assuming the Center for Natural Lands Management as the 501(c)3 preserve manager on Newhall Ranch. Ahmanson funding is being endowed through the National Fish and

Wildlife Foundation, pursuant to the Department's current endowment policy of 3.5% per year. All of the endowments assume that each endowment for at least three years prior to any funding being drawn against it for implementing long-term enhancement and management activities, including administrative costs.

The River Corridor PAR reflects the necessary endowment phasing to cover both the MSA and Multi-species ITP for long-term enhancement and management of the Santa Clara River and three songbird species, specific to the Department's Fish and Game Code jurisdiction over streambed and endangered species resources there. The Open Space PAR identifies the tributary drainages whose streambed resources are covered as part of the endowment. In addition, the Open Space PAR covers the enhancement and management of non-jurisdictional trust resources in the Newhall Ranch High Country and Salt Creek area.

Newhall and Dudek presented the first version of the PAR to the Department on February 19, 2010. The Department conducted its review through the end of April 2010. In September 2010, the PARs were revised and updated at the Department's direction to reflect the Draft LEDPA that was identified in the Final EIS/EIR. Soon after, Newhall and Dudek prepared a PAR for spineflower enhancement of the Ahmanson property. On October 13, 2010, Department staff met internally with the SCR Lands Program staff to review the draft PARs for form and content. The Department confirmed with Newhall thereafter that the PARs met the Lands Program standard, based on its independent review and verification of the information. Between from late October through the end of November 2010, the Department and Newhall met regularly to round out the necessary long-term enhancement and management activities within the PAR. On December 2, 2010, the Department provided Newhall with its final concurrence with the RMDP and SCP PARs, and was included as the basis for the required endowments in the MSA, MS ITP, and SCP ITP (pers. comm. via telephone from B. Courtney to M. Carpenter).

The final PARs reviewed and verified by the Department are attached to this memorandum for future reference related to implementation of mitigation under the permits and approvals provided by the RMDP and SCP.

Attachments (7)

cc: K Drewe, San Pedro
J Mattox, OGC

Newhall Land and Farming Company
M Carpenter

Section 1 - Property Information

Property Title: Newhall Spineflower Ph1_12.1.10_4.5

PAR ID: NL_10.10

Last Modified: 12/02/2010

Location/Jurisdiction Mission; Entrada
County
Address
City, State, Zip
Conserved Acres 34
Management type Not Selected
Date Created 11/09/2010 10:45:55 AM
Prepared for
Prepared by

Project Management Information

Developer/Proponent Information

Contact

Contact

Company

Company

Address

Address

City, State, Zip

City, State, Zip

Phone

Phone

Fax

Fax

E-Mail address

E-Mail address

Cost Year 2010

Date of site visit:

Development Project

Project Name

Total Project Acres 0

Stage of planning

Notes

Section 15 - Ongoing Tasks and Costs

Property Title: Newhall Spineflower Ph1_12.1.10_4.5

PAR ID: NL_10.10 12/02/2010

Task List	Specific Description	Unit	Number of Units	Cost / Unit	Annual Cost	Years Divide	Cont %	Total Cost
BIOTIC SURVEYS								
Annual Monitoring	Spnflwr monitoring	Item	1.00	4,099.00	4,099.00	1.0	10.0	4,508.90
Preserve Veg	Once/10 yrs	Not	1.00	115.00	115.00	1.0	10.0	126.50
Quarterly Monitoring	Spnflwr Qualitative	Item	1.00	1,312.00	1,312.00	1.0	10.0	1,443.20
Spineflower Extent	Once/10 yrs; Mapping	Item	1.00	197.00	197.00	1.0	10.0	216.70
Spineflower Seed		Item	1.00	1,000.00	1,000.00	1.0	10.0	1,100.00
Sub-Total								7,395.30
FIELD EQUIPMENT								
Field Equipment	Allowance	Item	1.00	2,500.00	2,500.00	1.0	10.0	2,750.00
Sub-Total								2,750.00
GENERAL MAINTENANCE								
General Maintenance	Qtrly Signage repairs,	Hour	104.00	40.00	4,160.00	1.0	10.0	4,576.00
Sub-Total								4,576.00
HABITAT MAINTENANCE								
Arg. Ant	Qtrly	Item	1.00	1,700.00	1,700.00	1.0	10.0	1,870.00
Exotic Plant Control	Control	Item	1.00	1,457.00	1,457.00	1.0	10.0	1,602.70
Exotic Plant Control	Supervision	Item	1.00	219.00	219.00	1.0	10.0	240.90
Exotic Plant Monitoring	Monitoring And Reporting	Item	1.00	219.00	219.00	1.0	10.0	240.90
Sub-Total								3,954.50
OFFICE MAINTENANCE								
Office Maintenance	Allowance	Item	1.00	2,500.00	2,500.00	1.0	10.0	2,750.00
Sub-Total								2,750.00
OPERATIONS								
Audit	Audit-cost share	Item	1.00	2,500.00	2,500.00	1.0	10.0	2,750.00
Emergency And Adapt		Item	1.00	2,750.00	2,750.00	1.0	10.0	3,025.00
Insurance	General Liability	Item	1.00	20.00	20.00	1.0	10.0	22.00
Sub-Total								5,797.00
PUBLIC SERVICES								
Access Control	Enforcement/Patrolling	L. Hours	104.00	40.00	4,160.00	1.0	10.0	4,576.00
Sub-Total								4,576.00
REPORTING								
Adaptive Mgt Working	Facilitation	Item	1.00	3,333.00	3,333.00	5.0	10.0	733.26
Aerial Photo	Digital Geo-referenced	Item	1.00	1,000.00	1,000.00	5.0	10.0	220.00
Agency Report	Data Mgt and Info Ctr	L. Hours	16.00	90.00	1,440.00	1.0	10.0	1,584.00
Agency Report	Qtrly, Annual Report	L. Hours	47.00	90.00	4,230.00	1.0	10.0	4,653.00
Management Plan	Update	Item	1.00	3,333.00	3,333.00	5.0	10.0	733.26
Sub-Total								7,923.52
SITE CONSTRUCTION/MAINT.								
Fence - Installed	Split Rail, 20 yr	Lin. Ft.	3,090.00	15.00	46,350.00	20.0	10.0	2,549.25

Section 15 - Ongoing Tasks and Costs

Property Title: Newhall Spineflower Ph1_12.1.10_4.5

PAR ID: NL_10.10 12/02/2010

Task List	Specific Description	Unit	Number of Units	Cost / Unit	Annual Cost	Years Divide	Cont %	Total Cost
Fence - Installed	Split Rail, annual 10% of	Lin. Ft.	309.00	15.00	4,635.00	1.0	10.0	5,098.50
	Sub-Total							7,647.75
Subtotal								47,370.07
Administration								11,368.81
Total								58,738.88

Section 16 - Financial Summary

Property Title: Newhall Spineflower Ph1_12.1.10_4.5

Date: 12/02/2010

1st Budget Year: 2010

State:

PAR Code: NL_10.10

Item Descriptions	Total
Initial & Capital Financial Requirements	
Revenues	\$0
Management Costs	\$0
Contingency Expense	\$0
Initial & Capital Management Total Costs	\$0
Administrative Costs of Total Management Costs	\$0
Initial & Capital Gross Costs	\$0
Initial & Capital Net Costs	\$0
Annual Ongoing Financial Requirements	
Revenues	\$0
Ongoing Costs	\$43,064
Contingency Expense	\$4,306
Ongoing Management Total Costs	\$47,370
Administrative Costs of Total Management Costs	\$11,369
Ongoing Gross Costs	\$58,739
Ongoing Net Costs	\$58,739
Endowment Requirements for Ongoing Stewardship	
Endowment to Produce Income of \$58,739	\$1,305,309
<p>Endowment per acre \$38,391</p> <p>Stewardship costs are based on 4.50% of Endowment Earnings per Year</p> <p>Ongoing management funding per year is \$58,739</p> <p>Resulting in a per acre per year cost of \$1,728</p>	
Total Funding Required	\$1,305,309

Section 1 - Property Information

Property Title: Newhall Spineflower Ph2_12.1.10_4.5

PAR ID: NL_10.10

Last Modified: 12/02/2010

Location/Jurisdiction Mission; Entrada
County
Address
City, State, Zip
Conserved Acres 109
Management type Not Selected
Date Created 12/02/2010 10:37:29 AM
Prepared for
Prepared by

Project Management Information

Contact

Company

Address

City, State, Zip

Phone

Fax

E-Mail address

Developer/Proponent Information

Contact

Company

Address

City, State, Zip

Phone

Fax

E-Mail address

Cost Year 2010

Date of site visit:

Development Project

Project Name

Total Project Acres 0

Stage of planning

Notes

Section 15 - Ongoing Tasks and Costs

Property Title: Newhall Spineflower Ph2_12.1.10_4.5

PAR ID: NL_10.10 12/02/2010

Task List	Specific Description	Unit	Number of Units	Cost / Unit	Annual Cost	Years Divide	Cont %	Total Cost
BIOTIC SURVEYS								
Annual Monitoring	Spnflwr monitoring	Item	1.00	13,023.00	13,023.00	1.0	10.0	14,325.30
Preserve Veg	Once/10 yrs	Not	1.00	115.00	115.00	1.0	10.0	126.50
Quarterly Monitoring	Spnflwr Qualitative	Item	1.00	4,167.00	4,167.00	1.0	10.0	4,583.70
Spineflower Extent	Once/10 yrs; Mapping	Item	1.00	627.00	627.00	1.0	10.0	689.70
Spineflower Seed		Item	1.00	1,000.00	1,000.00	1.0	10.0	1,100.00
Sub-Total								20,825.20
FIELD EQUIPMENT								
Field Equipment	Allowance	Item	1.00	2,500.00	2,500.00	1.0	10.0	2,750.00
Sub-Total								2,750.00
GENERAL MAINTENANCE								
General Maintenance	Qtrly Signage repairs,	Hour	208.00	40.00	8,320.00	1.0	10.0	9,152.00
Sub-Total								9,152.00
HABITAT MAINTENANCE								
Arg. Ant	Qtrly	Item	1.00	5,402.00	5,402.00	1.0	10.0	5,942.20
Exotic Plant Control	Control	Item	1.00	4,631.00	4,631.00	1.0	10.0	5,094.10
Exotic Plant Control	Supervision	Item	1.00	695.00	695.00	1.0	10.0	764.50
Exotic Plant Monitoring	Monitoring And Reporting	Item	1.00	695.00	695.00	1.0	10.0	764.50
Sub-Total								12,565.30
OFFICE MAINTENANCE								
Office Maintenance	Allowance	Item	1.00	2,500.00	2,500.00	1.0	10.0	2,750.00
Sub-Total								2,750.00
OPERATIONS								
Audit	Audit-cost share	Item	1.00	2,500.00	2,500.00	1.0	10.0	2,750.00
Emergency And Adapt		Item	1.00	5,500.00	5,500.00	1.0	10.0	6,050.00
Insurance	General Liability	Item	1.00	63.00	63.00	1.0	10.0	69.30
Sub-Total								8,869.30
PUBLIC SERVICES								
Access Control	Enforcement/Patrolling	L. Hours	208.00	40.00	8,320.00	1.0	10.0	9,152.00
Sub-Total								9,152.00
REPORTING								
Adaptive Mgt Working	Facilitation	Item	1.00	3,333.00	3,333.00	5.0	10.0	733.26
Agency Report	Qtrly, Annual Report	L. Hours	47.00	90.00	4,230.00	1.0	10.0	4,653.00
Management Plan	Update	Item	1.00	3,333.00	3,333.00	5.0	10.0	733.26
Sub-Total								6,119.52
SITE CONSTRUCTION/MAINT.								
Fence - Installed	Split Rail, 20 yr	Lin. Ft.	16,695.00	15.00	250,425.00	20.0	10.0	13,773.37
Fence - Installed	Split Rail, annual 10% of	Lin. Ft.	1,669.00	15.00	25,035.00	1.0	10.0	27,538.50

Section 15 - Ongoing Tasks and Costs

Property Title: Newhall Spineflower Ph2_12.1.10_4.5

PAR ID: NL_10.10 12/02/2010

Task List	Specific Description	Unit	Number of Units	Cost / Unit	Annual Cost	Years Divide	Cont %	Total Cost
	Sub-Total							41,311.87
	Subtotal							113,495.19
	Administration							27,238.84
	Total							140,734.04

Section 16 - Financial Summary

Property Title: Newhall Spineflower Ph2_12.1.10_4.5

Date: 12/02/2010

1st Budget Year: 2010

State:

PAR Code: NL_10.10

Item Descriptions	Total
Initial & Capital Financial Requirements	
Revenues	\$0
Management Costs	\$0
Contingency Expense	\$0
Initial & Capital Management Total Costs	\$0
Administrative Costs of Total Management Costs	\$0
Initial & Capital Gross Costs	\$0
Initial & Capital Net Costs	\$0
Annual Ongoing Financial Requirements	
Revenues	\$0
Ongoing Costs	\$103,177
Contingency Expense	\$10,318
Ongoing Management Total Costs	\$113,495
Administrative Costs of Total Management Costs	\$27,239
Ongoing Gross Costs	\$140,734
Ongoing Net Costs	\$140,734
Endowment Requirements for Ongoing Stewardship	
Endowment to Produce Income of \$140,734	\$3,127,423
<p>Endowment per acre \$28,692</p> <p>Stewardship costs are based on 4.50% of Endowment Earnings per Year</p> <p>Ongoing management funding per year is 140,734</p> <p>Resulting in a per acre per year cost of \$1,291</p>	
Total Funding Required	\$3,127,423

Section 1 - Property Information

Property Title: Newhall Spineflower Ph3_12.1.10_4.5

PAR ID: NL_10.10

Last Modified: 12/02/2010

Location/Jurisdiction Mission; Entrada
County
Address
City, State, Zip
Conserved Acres 83
Management type Not Selected
Date Created 12/02/2010 10:43:53 AM
Prepared for
Prepared by

Project Management Information

Developer/Proponent Information

Contact

Contact

Company

Company

Address

Address

City, State, Zip

City, State, Zip

Phone

Phone

Fax

Fax

E-Mail address

E-Mail address

Cost Year 2010

Date of site visit:

Development Project

Project Name

Total Project Acres 0

Stage of planning

Notes

Section 15 - Ongoing Tasks and Costs

Property Title: Newhall Spineflower Ph3_12.1.10_4.5

PAR ID: NL_10.10

12/02/2010

Task List	Specific Description	Unit	Number of Units	Cost / Unit	Annual Cost	Years Divide	Cont %	Total Cost
BIOTIC SURVEYS								
Annual Monitoring	Spnflwr monitoring	Item	1.00	9,878.00	9,878.00	1.0	10.0	10,865.80
Preserve Veg	Once/10 yrs	Not	1.00	115.00	115.00	1.0	10.0	126.50
Quarterly Monitoring	Spnflwr Qualitative	Item	1.00	3,161.00	3,161.00	1.0	10.0	3,477.10
Spineflower Extent	Once/10 yrs; Mapping	Item	1.00	476.00	476.00	1.0	10.0	523.60
Spineflower Seed		Item	1.00	1,000.00	1,000.00	1.0	10.0	1,100.00
Sub-Total								16,093.00
FIELD EQUIPMENT								
Field Equipment	Allowance	Item	1.00	2,500.00	2,500.00	1.0	10.0	2,750.00
Sub-Total								2,750.00
GENERAL MAINTENANCE								
General Maintenance	Qrtrly Signage repairs,	Hour	104.00	40.00	4,160.00	1.0	10.0	4,576.00
Sub-Total								4,576.00
HABITAT MAINTENANCE								
Arg. Ant	Qrtrly	Item	1.00	4,097.00	4,097.00	1.0	10.0	4,506.70
Exotic Plant Control	Control	Item	1.00	3,512.00	3,512.00	1.0	10.0	3,863.20
Exotic Plant Control	Supervision	Item	1.00	527.00	527.00	1.0	10.0	579.70
Exotic Plant Monitoring	Monitoring And Reporting	Item	1.00	527.00	527.00	1.0	10.0	579.70
Sub-Total								9,529.30
OFFICE MAINTENANCE								
Office Maintenance	Allowance	Item	1.00	2,500.00	2,500.00	1.0	10.0	2,750.00
Sub-Total								2,750.00
OPERATIONS								
Audit	Audit-cost share	Item	1.00	2,500.00	2,500.00	1.0	10.0	2,750.00
Emergency And Adapt		Item	1.00	2,750.00	2,750.00	1.0	10.0	3,025.00
Insurance	General Liability	Item	1.00	48.00	48.00	1.0	10.0	52.80
Sub-Total								5,827.80
PUBLIC SERVICES								
Access Control	Enforcement/Patrolling	L. Hours	104.00	40.00	4,160.00	1.0	10.0	4,576.00
Sub-Total								4,576.00
REPORTING								
Adaptive Mgt Working	Facilitation	Item	1.00	3,333.00	3,333.00	5.0	10.0	733.26
Agency Report	Qrtrly, Annual Report	L. Hours	47.00	90.00	4,230.00	1.0	10.0	4,653.00
Management Plan	Update	Item	1.00	3,333.00	3,333.00	5.0	10.0	733.26
Sub-Total								6,119.52
SITE CONSTRUCTION/MAINT.								
Fence - Installed	Split Rail, 20 yr	Lin. Ft.	8,690.00	15.00	130,350.00	20.0	10.0	7,169.25
Fence - Installed	Split Rail, annual 10% of	Lin. Ft.	869.00	15.00	13,035.00	1.0	10.0	14,338.50

Section 15 - Ongoing Tasks and Costs

Property Title: Newhall Spineflower Ph3_12.1.10_4.5

PAR ID: NL_10.10 12/02/2010

Task List	Specific Description	Unit	Number of Units	Cost / Unit	Annual Cost	Years Divide	Cont %	Total Cost
	Sub-Total							21,507.75
	Subtotal							73,729.37
	Administration							17,695.04
	Total							91,424.41

Section 16 - Financial Summary

Property Title: Newhall Spineflower Ph3_12.1.10_4.5

Date: 12/02/2010

1st Budget Year: 2010

State:

PAR Code: NL_10.10

Item Descriptions	Total
Initial & Capital Financial Requirements	
Revenues	\$0
Management Costs	\$0
Contingency Expense	\$0
Initial & Capital Management Total Costs	\$0
Administrative Costs of Total Management Costs	\$0
Initial & Capital Gross Costs	\$0
Initial & Capital Net Costs	\$0
Annual Ongoing Financial Requirements	
Revenues	\$0
Ongoing Costs	\$67,027
Contingency Expense	\$6,703
Ongoing Management Total Costs	\$73,729
Administrative Costs of Total Management Costs	\$17,695
Ongoing Gross Costs	\$91,424
Ongoing Net Costs	\$91,424
Endowment Requirements for Ongoing Stewardship	
Endowment to Produce Income of \$91,424	\$2,031,654
<p>Endowment per acre \$24,478</p> <p>Stewardship costs are based on 4.50% of Endowment Earnings per Year</p> <p>Ongoing management funding per year is \$91,424</p> <p>Resulting in a per acre per year cost of \$1,101</p>	
Total Funding Required	\$2,031,654

Section 1 - Property Information

Property Title: Newhall OS_12.1.10_Middle Cyn_4.5

PAR ID: NL_2010_

Last Modified: 12/02/2010

Location/Jurisdiction

County

Address

City, State, Zip

Conserved Acres 2

Management type Not Selected

Date Created 10/13/2010 03:02:33 PM

Prepared for

Prepared by

Project Management Information

Contact

Company

Address

City, State, Zip

Phone

Fax

E-Mail address

Developer/Proponent Information

Contact

Company

Address

City, State, Zip

Phone

Fax

E-Mail address

Cost Year 2010

Date of site visit:

Development Project

Project Name

Total Project Acres 0

Stage of planning

Notes

Section 15 - Ongoing Tasks and Costs

Property Title: Newhall OS_12.1.10_Middle Cyn_4.5

PAR ID: NL_2010_ 12/02/2010

Task List	Specific Description	Unit	Number of Units	Cost / Unit	Annual Cost	Years Divide	Cont %	Total Cost
BIOTIC SURVEYS								
Annual Monitoring	General Preserve	Item	1.00	1,440.00	1,440.00	1.0	10.0	1,584.00
Middle Canyon	Biological And Water	L. Hours	85.00	90.00	7,650.00	1.0	10.0	8,415.00
Sub-Total								9,999.00
FIELD EQUIPMENT								
Field Equipment	Allowance	Item	1.00	1,000.00	1,000.00	1.0	10.0	1,100.00
Sub-Total								1,100.00
GENERAL MAINTENANCE								
General Maintenance	Qtrly	L. Hours	52.00	40.00	2,080.00	1.0	10.0	2,288.00
Sub-Total								2,288.00
OFFICE MAINTENANCE								
Office Maintenance	Allowance	Item	1.00	500.00	500.00	1.0	10.0	550.00
Sub-Total								550.00
OPERATIONS								
Audit	Audit-cost share	Item	1.00	2,500.00	2,500.00	1.0	10.0	2,750.00
Emergency And Adapt		Item	1.00	5,000.00	5,000.00	1.0	10.0	5,500.00
Insurance	General Liability	Item	1.00	406.00	406.00	1.0	10.0	446.60
Supp Water	Middle Cyn	Item	1.00	5,000.00	5,000.00	1.0	10.0	5,500.00
Sub-Total								14,196.60
PUBLIC SERVICES								
Access Control	Enforcement/Patrolling	L. Hours	52.00	40.00	2,080.00	1.0	10.0	2,288.00
Sub-Total								2,288.00
REPORTING								
Agency Report	Annual Report	Item	1.00	400.00	400.00	1.0	10.0	440.00
Sub-Total								440.00
SITE CONSTRUCTION/MAINT.								
Fence - Installed	Split Rail, 10%	Lin. Ft.	300.00	15.00	4,500.00	1.0	10.0	4,950.00
Fence - Installed	Split Rail, 20yr	Lin. Ft.	3,000.00	15.00	45,000.00	20.0	10.0	2,475.00
Sub-Total								7,425.00
Subtotal								38,286.60
Administration								9,188.78
Total								47,475.38

Section 16 - Financial Summary

Property Title: *Newhall OS_12.1.10_Middle Cyn_4.5*

Date: 12/02/2010

1st Budget Year: 2010

State:

PAR Code: *NL_2010_*

<i>Item Descriptions</i>	<i>Total</i>
<i>Initial & Capital Financial Requirements</i>	
Revenues	\$0
Management Costs	\$0
Contingency Expense	\$0
<i>Initial & Capital Management Total Costs</i>	\$0
Administrative Costs of Total Management Costs	\$0
<i>Initial & Capital Gross Costs</i>	\$0
<i>Initial & Capital Net Costs</i>	\$0
<i>Annual Ongoing Financial Requirements</i>	
Revenues	\$0
Ongoing Costs	\$34,806
Contingency Expense	\$3,481
<i>Ongoing Management Total Costs</i>	\$38,287
Administrative Costs of Total Management Costs	\$9,189
<i>Ongoing Gross Costs</i>	\$47,475
<i>Ongoing Net Costs</i>	\$47,475
<i>Endowment Requirements for Ongoing Stewardship</i>	
<i>Endowment to Produce Income of \$47,475</i>	\$1,055,009
<i>Endowment per acre \$527,504</i>	
<i>Stewardship costs are based on 4.50% of Endowment Earnings per Year</i>	
<i>Ongoing management funding per year is \$47,475</i>	
<i>Resulting in a per acre per year cost of 23,738</i>	
<i>Total Funding Required</i>	\$1,055,009

Section 1 - Property Information

Property Title: Newhall OS_12.1.10_River_4.5

PAR ID: NL_2010_ Last Modified: 12/02/2010

Location/Jurisdiction

County

Address

City, State, Zip

Conserved Acres 900

Management type Not Selected

Date Created 11/09/2010 10:51:18 AM

Prepared for

Prepared by

Project Management Information

Contact

Company

Address

City, State, Zip

Phone

Fax

E-Mail address

Developer/Proponent Information

Contact

Company

Address

City, State, Zip

Phone

Fax

E-Mail address

Cost Year 2010

Date of site visit:

Development Project

Project Name

Total Project Acres 0

Stage of planning

Notes

Section 15 - Ongoing Tasks and Costs

Property Title: Newhall OS_12.1.10_River_4.5

PAR ID: NL_2010_ 12/02/2010

Task List	Specific Description	Unit	Number of Units	Cost / Unit	Annual Cost	Years Divide	Cont %	Total Cost
BIOTIC SURVEYS								
Annual Monitoring	Gen Preserve	L. Hours	160.00	90.00	14,400.00	1.0	10.0	15,840.00
Sub-Total								15,840.00
FIELD EQUIPMENT								
Field Equipment	Allowance	Item	1.00	3,000.00	3,000.00	1.0	10.0	3,300.00
Sub-Total								3,300.00
GENERAL MAINTENANCE								
General Maintenance	Qtrly signage repair,	L. Hours	104.00	40.00	4,160.00	1.0	10.0	4,576.00
Sub-Total								4,576.00
HABITAT MAINTENANCE								
Exotic Animal Control	Frogs and crayfish control	Item	1.00	25,000.00	25,000.00	5.0	10.0	5,500.00
Exotic Animal Control	Monitoring -Frogs and	Item	1.00	4,000.00	4,000.00	2.0	10.0	2,200.00
Exotic Animal Control	Trapping-cowbird	Item	1.00	25,000.00	25,000.00	5.0	10.0	5,500.00
Exotic Plant Control	Control or contribution	Item	1.00	2,500.00	2,500.00	1.0	10.0	2,750.00
Sub-Total								15,950.00
OFFICE MAINTENANCE								
Office Maintenance	Allowance	Item	1.00	1,500.00	1,500.00	1.0	10.0	1,650.00
Sub-Total								1,650.00
OPERATIONS								
Audit	Audit-cost share	Item	1.00	2,500.00	2,500.00	1.0	10.0	2,750.00
Insurance	General Liability	Item	1.00	1,218.00	1,218.00	1.0	10.0	1,339.80
Sub-Total								4,089.80
PUBLIC SERVICES								
Access Control	Enforcement/Patrolling	L. Hours	210.00	40.00	8,400.00	1.0	10.0	9,240.00
Sub-Total								9,240.00
REPORTING								
Agency Report	Annual Report	Item	1.00	1,200.00	1,200.00	1.0	10.0	1,320.00
Sub-Total								1,320.00
SITE CONSTRUCTION/MAINT.								
Fence - Installed	Annual barrier placement	Item	1.00	4,000.00	4,000.00	1.0	10.0	4,400.00
Fence - Installed	Viewing platform	Item	1.00	70,000.00	70,000.00	20.0	10.0	3,850.00
Sub-Total								8,250.00
Subtotal								64,215.80
Administration								15,411.79
Total								79,627.59

Section 16 - Financial Summary

Property Title: Newhall OS_12.1.10_River_4.5

Date: 12/02/2010

1st Budget Year: 2010

State:

PAR Code: NL_2010_

Item Descriptions	Total
Initial & Capital Financial Requirements	
Revenues	\$0
Management Costs	\$0
Contingency Expense	\$0
Initial & Capital Management Total Costs	\$0
Administrative Costs of Total Management Costs	\$0
Initial & Capital Gross Costs	\$0
Initial & Capital Net Costs	\$0
Annual Ongoing Financial Requirements	
Revenues	\$0
Ongoing Costs	\$58,378
Contingency Expense	\$5,838
Ongoing Management Total Costs	\$64,216
Administrative Costs of Total Management Costs	\$15,412
Ongoing Gross Costs	\$79,628
Ongoing Net Costs	\$79,628
Endowment Requirements for Ongoing Stewardship	
Endowment to Produce Income of: \$79,628	\$1,769,502
<p>Endowment per acre \$1,966 Stewardship costs are based on 4.50% of Endowment Earnings per Year Ongoing management funding per year is \$79,628 Resulting in a per acre per year cost of \$88</p>	
Total Funding Required	\$1,769,502

Section 1 - Property Information

Property Title: Newhall OS_12.1.10_HighCntry_SC_4.5

PAR ID: NL_2010_

Last Modified: 12/02/2010

Location/Jurisdiction

County

Address

City, State, Zip

Conserved Acres 7500

Management type Not Selected

Date Created 10/13/2010 03:01:36 PM

Prepared for

Prepared by

Project Management Information

Contact

Company

Address

City, State, Zip

Phone

Fax

E-Mail address

Developer/Proponent Information

Contact

Company

Address

City, State, Zip

Phone

Fax

E-Mail address

Cost Year 2010

Date of site visit:

Development Project

Project Name

Total Project Acres 0

Stage of planning

Notes

Section 15 - Ongoing Tasks and Costs

Property Title: Newhall OS_12.1.10_HighCntry_SC_4.5

PAR ID: NL_2010_ 12/02/2010

Task List	Specific Description	Unit	Number of Units	Cost / Unit	Annual Cost	Years Divide	Cont %	Total Cost
BIOTIC SURVEYS								
Annual Monitoring	General Preserve	Item	1.00	10,800.00	10,800.00	1.0	10.0	11,880.00
Sub-Total								11,880.00
FIELD EQUIPMENT								
Field Equipment	Allowance	Item	1.00	6,000.00	6,000.00	1.0	10.0	6,600.00
Sub-Total								6,600.00
GENERAL MAINTENANCE								
General Maintenance	Qtrly	Item	1.00	9,600.00	9,600.00	1.0	10.0	10,560.00
Sub-Total								10,560.00
HABITAT MAINTENANCE								
Feral Animal Control	Pets	Item	1.00	1,200.00	1,200.00	2.0	10.0	660.00
Other	Cattle carcass relocation	Item	1.00	1,200.00	1,200.00	2.0	10.0	660.00
Sub-Total								1,320.00
OFFICE MAINTENANCE								
Office Maintenance	Allowance	Item	1.00	3,000.00	3,000.00	1.0	10.0	3,300.00
Sub-Total								3,300.00
OPERATIONS								
Audit	Audit-cost share	Item	1.00	2,500.00	2,500.00	1.0	10.0	2,750.00
Insurance	General Liability	Item	1.00	2,436.00	2,436.00	1.0	10.0	2,679.60
Sub-Total								5,429.60
PUBLIC SERVICES								
Access Control	Enforcement/Patrolling	L. Hours	288.00	40.00	11,520.00	1.0	10.0	12,672.00
Community Outreach	High Country	Item	1.00	1,000.00	1,000.00	5.0	10.0	220.00
Management	JPA, Other	Item	32.00	90.00	2,880.00	1.0	10.0	3,168.00
Sub-Total								16,060.00
REPORTING								
Agency Report	Annual Report	Item	1.00	2,400.00	2,400.00	1.0	10.0	2,640.00
Sub-Total								2,640.00
Subtotal								57,789.60
Administration								13,869.50
Total								71,659.10

Section 16 - Financial Summary

Property Title: Newhall OS_12.1.10_HighCntry_SC_4.5

Date: 12/02/2010

1st Budget Year: 2010

State:

PAR Code: NL_2010

Item Descriptions	Total
Initial & Capital Financial Requirements	
Revenues	\$0
Management Costs	\$0
Contingency Expense	\$0
Initial & Capital Management Total Costs	\$0
Administrative Costs of Total Management Costs	\$0
Initial & Capital Gross Costs	\$0
Initial & Capital Net Costs	\$0
Annual Ongoing Financial Requirements	
Revenues	\$0
Ongoing Costs	\$52,536
Contingency Expense	\$5,254
Ongoing Management Total Costs	\$57,790
Administrative Costs of Total Management Costs	\$13,870
Ongoing Gross Costs	\$71,659
Ongoing Net Costs	\$71,659
Endowment Requirements for Ongoing Stewardship	
Endowment to Produce Income of \$71,659	\$1,592,425
<p><i>Endowment per acre \$212</i></p> <p><i>Stewardship costs are based on 4.50% of Endowment Earnings per Year</i></p> <p><i>Ongoing management funding per year is \$71,659</i></p> <p><i>Resulting in a per acre per year cost of \$10</i></p>	
Total Funding Required	\$1,592,425

Section 1 - Property Information

Property Title: Ahmanson 26.2_3.5_12/1/10

PAR ID: Ahm26.2

Last Modified: 11/22/2010

Location/Jurisdiction

County

Address

City, State, Zip

Conserved Acres 26.2

Management type Not Selected

Date Created 11/22/2010 01:58:15 PM

Prepared for

Prepared by

Project Management Information

Contact

Company

Address

City, State, Zip

Phone

Fax

E-Mail address

Developer/Proponent Information

Contact

Company

Address

City, State, Zip

Phone

Fax

E-Mail address

Cost Year 2011

Date of site visit:

Development Project

Project Name

Total Project Acres 0

Stage of planning

Notes

Section 14 - Initial & Capital Tasks and Costs

Property Title: Ahmanson 26.2_3.5_12/1/10

PAR ID: Ahm26.2

12/02/2010

Task List	Specific Description	Unit	Quantity	Cost / Unit	Annual Cost	Times Years	Cont %	Total Cost
BIOTIC SURVEYS								
Habitat Characterization	Field Survey and Study	Item	1.00	30,000.00	30,000.00	1.0	10.0	33,000.00
Project Management	Manage Project And Staff	L. Hours	8.00	110.00	880.00	5.0	10.0	4,840.00
Spineflower Extent	1x/10yrs	Hour	40.00	110.00	4,400.00	1.0	10.0	4,840.00
Spineflower Monitoring	1x/2yrs (Yr 1-10); 1x/10yrs	Hour	80.00	110.00	8,800.00	5.0	10.0	48,400.00
Sub-Total								91,080.00
GENERAL MAINTENANCE								
Project Management	Quarterly Inspection	Hour	52.00	110.00	5,720.00	1.0	10.0	6,292.00
Sub-Total								6,292.00
HABITAT MAINTENANCE								
Exotic Mgt Plan	Survey and Plan Prep	Item	1.00	10,000.00	10,000.00	1.0	10.0	11,000.00
Exotic Plant Control	Annual control labor	Hour	65.00	40.00	2,600.00	5.0	10.0	14,300.00
Exotic Plant Control	Thatch removal	Hour	40.00	40.00	1,600.00	10.0	10.0	17,600.00
Exotic Plant Control	Annual control mgt	Hour	16.00	110.00	1,760.00	5.0	10.0	9,680.00
Exotic Plant Monitoring	Annual control monitoring	Hour	32.00	110.00	3,520.00	5.0	10.0	19,360.00
Sub-Total								71,940.00
OPERATIONS								
Budgeting	Budget & Reconcile	L. Hours	2.00	110.00	220.00	1.0	10.0	242.00
Insurance	General Liability	Item	1.00	200.00	200.00	1.0	10.0	220.00
Project Accounting	Setup And Maintain	L. Hours	4.00	110.00	440.00	1.0	10.0	484.00
Travel	Mileage	Miles	400.00	0.60	240.00	1.0	10.0	264.00
Sub-Total								1,210.00
PUBLIC SERVICES								
Sign	Boundary 8" X 13.5"	Item	40.00	20.00	800.00	1.0	10.0	880.00
Sub-Total								880.00
REPORTING								
Agency Report	Annual Report	L. Hours	32.00	110.00	3,520.00	1.0	10.0	3,872.00
Sub-Total								3,872.00
SITE CONSTRUCTION/MAINT.								
Fence- Installed	Split Rail	Lin. Ft.	4,600.00	15.00	69,000.00	1.0	10.0	75,900.00
Sub-Total								75,900.00
Subtotal								251,174.00
Administration								37,676.10
Total								288,850.10

Section 15 - Ongoing Tasks and Costs

Property Title: Ahmanson 26.2_3.5_12/1/10

PAR ID: Ahm26.2

12/02/2010

Task List	Specific Description	Unit	Number of Units	Cost / Unit	Annual Cost	Years Divide	Cont %	Total Cost
BIOTIC SURVEYS								
Project Management	Manage Project And Staff	L. Hours	8.00	110.00	880.00	10.0	10.0	96.80
Spineflower Extent	1x/10yrs	Hour	40.00	110.00	4,400.00	10.0	10.0	484.00
Spineflower Monitoring	1x/2yrs (Yr 1-10); 1x/10yrs	Hour	80.00	110.00	8,800.00	10.0	10.0	968.00
Sub-Total								1,548.80
GENERAL MAINTENANCE								
Project Management	Quarterly Inspection	Hour	52.00	110.00	5,720.00	1.0	10.0	6,292.00
Sub-Total								6,292.00
HABITAT MAINTENANCE								
Exotic Plant Control	Annual control labor	Hour	65.00	40.00	2,600.00	1.0	10.0	2,860.00
Exotic Plant Control	Annual control mgt	Hour	16.00	110.00	1,760.00	1.0	10.0	1,936.00
Exotic Plant Monitoring	Annual control monitoring	Hour	32.00	110.00	3,520.00	5.0	10.0	774.40
Sub-Total								5,570.40
OPERATIONS								
Budgeting	Budget & Reconcile	L. Hours	2.00	110.00	220.00	1.0	10.0	242.00
Insurance	General Liability	Item	1.00	200.00	200.00	1.0	10.0	220.00
Project Accounting	Setup And Maintain	L. Hours	4.00	110.00	440.00	1.0	10.0	484.00
Travel	Mileage	Miles	400.00	0.60	240.00	1.0	10.0	264.00
Sub-Total								1,210.00
PUBLIC SERVICES								
Sign	Boundary 8" X 13.5"	Item	40.00	20.00	800.00	5.0	10.0	176.00
Sub-Total								176.00
REPORTING								
Agency Report	Annual Report	L. Hours	32.00	110.00	3,520.00	1.0	10.0	3,872.00
Sub-Total								3,872.00
SITE CONSTRUCTION/MAINT.								
Fence - Installed	Split Rail	Lin. Ft.	4,600.00	15.00	69,000.00	20.0	10.0	3,795.00
Fence - Installed	Split Rail repair	Lin. Ft.	230.00	15.00	3,450.00	1.0	10.0	3,795.00
Sub-Total								7,590.00
Subtotal								26,259.20
Administration								3,938.88
Total								30,198.08

Section 16 - Financial Summary

Property Title: Ahmanson 26.2_3.5_12/1/10

Date: 12/02/2010

1st Budget Year: 2011

State:

PAR Code: Ahm26.2

<i>Item Descriptions</i>	<i>Total</i>
Initial & Capital Financial Requirements	
Revenues	\$0
Management Costs	\$228,340
Contingency Expense	\$22,834
Initial & Capital Management Total Costs	\$251,174
Administrative Costs of Total Management Costs	\$37,676
Initial & Capital Gross Costs	\$288,850
Initial & Capital Net Costs	\$288,850
Annual Ongoing Financial Requirements	
Revenues	\$0
Ongoing Costs	\$23,872
Contingency Expense	\$2,387
Ongoing Management Total Costs	\$26,259
Administrative Costs of Total Management Costs	\$3,939
Ongoing Gross Costs	\$30,198
Ongoing Net Costs	\$30,198
Endowment Requirements for Ongoing Stewardship	
Endowment to Produce Income of \$30,198	\$862,802
<p><i>Endowment per acre \$32,931</i></p> <p><i>Stewardship costs are based on 3.50% of Endowment Earnings per Year</i></p> <p><i>Ongoing management funding per year is \$30,198</i></p> <p><i>Resulting in a per acre per year cost of \$1,153</i></p>	
Total Funding Required	\$1,151,652

Newhall Ranch Resource Management and Development Plan

10.0 ADAPTIVE MANAGEMENT

This section describes the adaptive management program and remedial measures for the River Corridor SMA, High Country SMA, Salt Creek, and Open Area preserve areas. The adaptive management program and remedial measures for the spineflower preserves are separately described in the Newhall Ranch SCP and associated Candidate Conservation Agreement.

McEachern et al. (2006) provide a description of the concept of adaptive management.

[Adaptive management] is an iterative process of strategy, design, implementation, monitoring, evaluation and adjusting management to maximize conservation success. It evaluates decisions or actions through carefully designed monitoring and proposed subsequent modification to management, threat abatement and monitoring. The modifications are in turn tested with an appropriate, perhaps redesigned, monitoring protocol. At each turn of the cycle, active learning through monitoring and evaluation reduces management uncertainty. Adaptive management is logical, can deal with uncertainty and data gaps, and is similar to the scientific process of hypothesis testing.

Preserve maintenance and remedial actions will be adaptive and based on the biannual assessments and may include adjusting management techniques and trigger points based on quantitative data collected during long-term monitoring. In general, remedial measures will include implementing maintenance tasks outlined in the maintenance section.

10.1 Wildfire/Geologic Events

In the event that a preserve or a portion of a preserve burns in a wildfire or suffers from mass movements (e.g., landslides, slope sloughing, or other geologic events), the preserve manager and/or NLMO shall promptly review the site and determine what action, if any, should be taken. The primary anticipated post-fire preserve management activity involves monitoring the site and controlling annual weeds that may invade burned areas following a fire event, especially when such weeds were not previously present or were present in lower densities. If fire control lines or other forms of bulldozer damage occur in the preserves, these areas would be repaired and revegetated to pre-burn conditions or better. An Emergency Fire Response Plan will be prepared prior to the establishment of the preserves.

In general, a burned site will be left to recover naturally from wildfire or geologic events. The native habitat types within the preserve are well adapted to recover from wildfires unless the fire

Newhall Ranch Resource Management and Development Plan

frequency is artificially increased. Therefore, burned areas should not be seeded or sprayed with soil stabilizer, straw, or hay. The latter two items are usually contaminated with various problematic weed seeds and often include noxious weed seed. It should be noted that several species of weeds not considered to be noxious by the U.S. Department of Agriculture (USDA) may be considered a noxious weed in natural preserve areas and if introduced would be very expensive to control or eradicate. In addition, active post-fire revegetation and soil stabilization efforts interfere with natural post-fire successional species and vegetation development stages that should be allowed to occur for the habitat to properly recover and regenerate.

Erosion and ash distribution is an expected and naturally occurring event following a wildfire and is part of the ecological cycle. Therefore, erosion control devices, including seeding, straw wattles, and soil tackifiers, should be avoided following a fire event. An exception to this would be fires that occur at a higher than average frequency, which may artificially accelerate erosion processes. This situation is to be evaluated by the preserve manager. Imminent and unavoidable threats to human health, safety, and welfare represent another exception to this passive management approach in post-fire conditions. Fire frequencies have a tendency to increase at the urban-wildland interface. If the preserves are subject to a greater than natural fire frequency, the guidelines outlined herein shall be followed to help ensure that the preserves recover to a natural state.

When deemed necessary for fires that occur at a higher than average frequency that may artificially accelerate erosion processes, the preferred erosion control devices to be used include fabric silt fencing, gravel or sand bags (made of biodegradable burlap), straw wattles certified as weed-free (not just free of “USDA noxious weeds,” but free of all weeds), and judicious seeding with locally indigenous native species free of weed seed. Seed shall be tested by a certified laboratory and all weed seeds identified by species. The quantity of weed seed shall be indicated in units of quantity of weed seed per pound of native seed, and sorted by size and weight to eliminate weed seeds determined to be noxious or problematic by the preserve manager.

Items that often include problematic noxious or invasive weed seeds should be avoided. These include hay and straw bales, non-certified wattles, and non-native, non-locally indigenous seed species.

The same passive, successional regeneration holds true for mass-movement, landslide, or slope sloughing types of events. Some plant species, quite possibly including spineflower, have evolved and/or adapted to recruit into these types of geologically disturbed areas.

Newhall Ranch Resource Management and Development Plan

10.2 Restoration and Enhancement Activities within Preserve Areas

Where construction has impacted Preserve areas, restoration shall occur. Restoration of disturbed portions of the preserves will be performed as outlined in *Section 7.0*. In summary, areas that have greater than 30% cover by weeds (not including annual grasses) will be restored to have at least 70% native cover. In addition, any and all Cal-IPC List A and B plants that are present in the impact area will be controlled. Restoration and enhancement efforts within the preserve shall be performed in such a manner that the overall habitat is improved, if only by reducing the quantity of weeds within the preserve. Habitat or biological resources shall not be negatively impacted directly or indirectly by restoration or enhancement. Therefore, restoration and enhancement projects shall be determined not to negatively affect, either directly or indirectly, habitat and other biological resources on site and shall be reviewed and approved by the County and CDFG.

Restoration and enhancement projects shall utilize only locally indigenous plants appropriate to the habitat being restored or enhanced. Plants and seed shall be from the local region and from similar elevations. Seed shall be tested prior to delivery to ensure it is free of problematic weeds, pests, and disease. Restoration efforts will focus on the use of seed and only include container plants when seed is not available or able to be collected in a reasonable amount of time, or if germination of a particular species from seed is documented as difficult and/or typically requires specific conditions such as fire, scarification, or acidification.

Habitat restoration sites may be temporarily irrigated to establish native plants and seed. If irrigation is utilized, it shall not alter pre-existing hydrology conditions within the preserve areas and shall be programmed to eliminate runoff. In addition, the system shall be used to establish plants and be scheduled to acclimate them to natural rainfall cycles. Temporary irrigation systems, which will be subject to preapproval by the CDFG, shall be removed after a maximum of 5 years. Temporary erosion control devices may be used during restoration and enhancement work to prevent rills and gullies from forming and associated sedimentation and/or stream turbidity. Erosion control devices may include native, locally indigenous hydroseed mix, fabric silt fences, biodegradable burlap sand bags, or other preapproved devices. Hay and straw bales, wattles, and other devices that often host weed seeds shall be avoided. Erosion control devices shall be removed once the site is adequately vegetated.

Habitat restoration and enhancement plans (including restoration plans) for areas within the preserves shall be prepared by a qualified biologist and submitted to the County and CDFG for approval prior to implementation. Restoration and enhancement plans shall include the following information at a minimum:

Newhall Ranch Resource Management and Development Plan

1. Maps showing the exact location and acreage of the site
2. A description of the restoration project and proposed methodology
3. Project proponent
4. Name of biologist who prepared the plan
5. Map and description of the existing habitat, adjacent habitat, and proposed habitat
6. List of proposed plant and seed species
7. Plant origins
8. Container sizes
9. Species composition
10. Installation schedule
11. Proposed monitoring and maintenance schedule and activities
12. Performance standards.

Seeds shall meet the requirements indicated herein and container plants shall be inspected by the preserve manager for weeds, disease, and the presence of pests, including Argentine ants, prior to delivery to the site and during delivery. Plants with pests, weeds, or diseases shall be rejected and immediately removed from the site. Mycorrhizal inoculation shall be used in areas where the soil is damaged, at the discretion of the preserve manager.

Spineflower Conservation Plan December 3, 2010

within the preserve to maintain pre-construction hydrologic conditions in the preserve. Hydrologic conditions will be maintained in conformance with *Section 9.2.7*.

This preserve contains a utility easement that is not under the control of Newhall Land, and, as described in *Section 6.1.3* above, maintenance activities may occur within the preserve boundary pursuant to existing utility easements. These activities include, but are not necessarily limited to, (1) recovery and repair of downed lines, including air-crane operations; (2) repair/replacement of towers and poles, including air-crane operations; (3) reconstruction/maintenance of access roads; (4) maintenance of fuel modification zones around tower footings; (5) maintenance of drainage from access roads; (6) erosion control; (7) cleaning, painting, coating, and debris removal from power lines, towers, or footings; (8) repair/replacement of buried gas lines or markers; (9) installation of retaining walls and maintenance of visual observation footpaths; (10) maintenance of fencing, if present; (11) maintenance of electrical grounding systems on towers and fencing, if necessary; and (12) Emergency Response operations. A good-faith effort will be made to coordinate with the easement holder to install non-barbed wire or similar fencing with appropriate signage around any existing spineflower locations within the easement. Newhall Land cannot be responsible for spineflower within an easement held by others.

Non-native plants in the preserve will be managed in accordance with a Preserve System Non-Native Management Plan to be developed as part of the adaptive management program described in *Section 10.0*.

10.0 ADAPTIVE MANAGEMENT PROGRAM

10.1 Development of the Adaptive Management Framework

Development of an adaptive management framework to support the conservation goal of this Plan began after preliminary attempts to develop management based upon performance standards and remedial-action triggers proved to be premature. The combination of natural variability inherent with spineflower populations and the lack of more complete information regarding the taxon's biology and ecology required the adoption of a more flexible, programmatic approach.

As described in *Section 4.0*, the spineflower is an annual, spring-blooming plant exhibiting dramatic fluctuations in aboveground populations apparently tied to annual climatic variability and other poorly understood stochastic (random) environmental variables. Population levels vary from very small numbers of plants in severe drought years to millions of plants when growing conditions are more favorable. From a management and monitoring perspective, therefore, the natural variability in the observed population levels can interfere with detecting the effects of non-natural factors. In particular, population declines due to anthropogenic factors can be

Spineflower Conservation Plan December 3, 2010

difficult to differentiate from the natural variability of the system. Furthermore, annual plant seed banks are difficult to study because a potentially large and significant portion of the population resides below ground in a seed bank that is otherwise difficult to directly quantify. The need to balance this natural uncertainty with the demands for developing scientifically based and timely conservation and management methods calls for a flexible adaptive management approach.

The adaptive management framework proposed in the Plan thus is designed to balance natural sources of uncertainty with the demands and finite timescale associated with the conservation planning process. The adaptive management planning team was expanded in 2007 with the addition of scientific experts Jodi McGraw, PhD, and John Willoughby to the existing team of resource agency staff, land managers, landowners, and consultants representing CDFG, the Center for Natural Lands Management (CNLM), and Newhall Land. Since that time, development of the adaptive management framework has proceeded steadily, through iterations of strategy and design, using available information.

10.2 The Concept of Adaptive Management

McEachern et al. (2006) provide a description of the concept of adaptive management. The description is provided in the context of multiple-species conservation planning, but it applies equally well to this situation, given the similar issues of uncertainty and incomplete information that are often inherent in the conservation planning process (McEachern et al. 2006, p. 18).

[Adaptive management] is an iterative process of strategy, design, implementation, monitoring, evaluation and adjusting management to maximize conservation success. It evaluates decisions or actions through carefully designed monitoring and proposed subsequent modification to management, threat abatement and monitoring. The modifications are in turn tested with an appropriate, perhaps redesigned, monitoring protocol. At each turn of the cycle, active learning through monitoring and evaluation reduces management uncertainty. Adaptive management is logical, can deal with uncertainty and data gaps, and is similar to the scientific process of hypothesis testing.

10.3 Components of the Adaptive Management Framework

Using the McEachern et al. (2006) description as a foundation, the proposed adaptive management framework includes the following key elements:

- Biological goals and objectives (*Section 3.0*)
- Description of the programmatic approach (*Section 10.4*)

Spineflower Conservation Plan December 3, 2010

- Identification and evaluation of threats (*Section 10.4* and *Appendix E*)
- Reporting and plan adjustments (*Section 10.5*)
- Monitoring protocols (*Section 11.0*).

These key elements form the basis of the proposed adaptive management program and thus provide the framework that will be augmented and modified as the adaptive management program progresses.

10.4 Programmatic Approach

The proposed adaptive management framework is being developed partly as a stressor-based plan that focuses on managing anthropogenic threats and partly as a series of study designs to inform and improve future management. Monitoring will be tied directly to management actions (i.e., “effectiveness” monitoring), such that management can be evaluated as having the desired effect of maintaining or enhancing spineflower populations. Management actions are categorized as near-, intermediate-, and long-term (i.e., 0 to 1 year, 1 to 5 years, and 5 to 20 years; time frames are set based on the timing of Annual Program Review) and are linked to (1) the characterization of threats as low, medium, or high priorities for management and (2) how studies can be linked to the potential for future positive enhancement activities. For example, near-term actions would address high-priority threats, such as existing and anticipated invasion by non-native species. Annual review, near-term adjustment, long-range planning and experimentation, and the development of annual work plans are incorporated as features of the adaptive management framework.

Adjustments to the annual work plans will rely on feedback from monitoring activities and on the newly available information (e.g., scientific research) to guide changes in management activities or overall strategy. Adjustments to management will also be made based upon the response of spineflower to experimentally designed small scale management trials. Decision-making responsibilities and ongoing development of the adaptive management process are the responsibility of an Adaptive Management Working Group comprising land managers, stakeholders, and scientific experts. The Adaptive Management Working Group is responsible for evaluating completed management actions and defining explicit objectives for future management actions.

A total of 10 threats and two studies were initially identified and evaluated during the development of the adaptive management program. Seven threats, including non-native plants, the loss of genetic diversity, fire suppression, trampling, fire exclusion, herbivory and seed predation, and the disruption of the natural soil-disturbance regime, are being carried forward as

Spineflower Conservation Plan December 3, 2010

a focus of the adaptive management program, and detailed evaluations are provided in *Appendix E*. Drought, nitrogen deposition, and Argentine ants were originally considered to be addressed through adaptive management, but were eliminated for different reasons: Drought and nitrogen were eliminated from the adaptive management program because direct management is not considered feasible and since their potential effects are manifested in changes (i.e., increased cover of non-native grasses, changes in vegetation communities) that are already being addressed by adaptive management. Because Argentine ants can be effectively managed within and adjacent to the preserves through general aspects of preserve design with a limited need for active management and human mediation, it is not necessary to address Argentine ants through adaptive management. Two experimental designs were evaluated and adopted as part of the adaptive management program. These designs involve a spineflower habitat characterization study (see *Section 10.5.4*, Spineflower Habitat Characterization Study, below) and a seed sowing and germination experiment based on seeds salvaged from development areas (see *Section 10.5.3*, Spineflower Enhancement Program, below).

10.5 Management Framework

This section describes the basic organizational structure of the proposed management framework based on the model provided by McEachern et al. (2006). The basic organizational elements include an Adaptive Management Working Group and a Technical Advisory Subgroup, an Annual Program Review, and a Spineflower Information Center that provides centralized storage and facilitates a structured flow of information related to all aspects of the adaptive management program.

10.5.1 Adaptive Management Working Group and Technical Advisory Subgroup

The Adaptive Management Working Group will consist of land managers, resource agency staff, and scientific experts. The Adaptive Management Working Group is the ultimate decision-making entity that will guide the management, monitoring, and planning activities of the adaptive management program. Management actions will be implemented using annual work plans developed by the Adaptive Management Working Group. Annual work plans will be developed based on the priority level assigned to individual threats and will incorporate the corresponding recommended management actions that are to be implemented in the upcoming year based on the results of monitoring.

The Technical Advisory Subgroup will consist of a subset of the Adaptive Management Working Group, specifically responsible for addressing technical scientific issues associated with management, monitoring designs, and data analysis.

Spineflower Conservation Plan December 3, 2010

10.5.2 Annual Program Review

A fundamental element of the adaptive management program is a repeating process of periodic review, short-term adjustment, and long-range planning. The goal of Annual Program Review is to evaluate the success of completed management actions to date, to develop new management actions and objectives as necessary, and to prepare annual work plans for the implementation of management actions in the upcoming year. Annual Program Review will be conducted by the Adaptive Management Working Group in September or October of each year, once spineflower is dehiscent, but before the onset of germination associated with seasonal fall and winter rains, which typically begin in October. The timing of Annual Program Review also must provide sufficient time to compile and analyze the monitoring data from the current year's activities, to incorporate that data into decision making, and to prepare the annual work plan for the upcoming year. As proposed by McEachern et al. (2006), Annual Program Review may include peer presentations and external review but will ultimately evaluate monitoring data to determine the success of management actions that have been implemented.

Annual Program Review will allow short-term adjustments to be made to the adaptive management program based on the results of implemented management actions. Short-term adjustments may result in changes to ongoing or planned management actions. Consideration of long-range planning will be done annually but will likely involve an overall evaluation of management activities over several years (e.g., over a 5-year horizon). Long-range planning pertains more broadly to the ongoing refinement of the biological goals and objectives of the Plan.

10.5.3 Spineflower Enhancement Program

A spineflower enhancement program will be implemented at the direction of CDFG. The program will involve experimentation utilizing salvaged seed sown into new non-preserve areas. Results of those experiments will inform managers of the potential for future use of banked seeds to expand preserve populations.

10.5.3.1 Salvaged Seed Experimental Program.

Salvaged material (e.g., soils, seeds) taken from development areas will be used experimentally to attempt to establish new spineflower occurrences in open space areas, in the Salt Creek corridor and in an area north of the proposed San Martinez Grande Preserve. Sowing and monitoring these salvaged seeds should improve the overall understanding of SFVS' ecology and life history. This increased understanding may inform future SFVS management decisions within the Newhall Ranch preserve areas. The results of these experiments and their potential contribution to future conservation management are not known at this time. However, the

Spineflower Conservation Plan December 3, 2010

experimental activities will improve understanding of SFVS and may provide valuable information that could be used to inform adaptive management decisions on whether banked preserve seeds could be utilized to expand preserve populations.

The direct seeding plan, which will include proposed monitoring and maintenance schedules and activities, shall be submitted to CDFG for input and approval prior to implementation.

In general, direct seeding will include identifying locations within the receiver areas with appropriate soils, geology, aspect, slope, and vegetation conditions. Once the appropriate area(s) is identified and approved by CDFG, the site shall be adequately prepared by staking the boundaries, removing weeds and debris, and applying seeds. Seeding shall be performed at the onset of the rainy season (October through early December).

Seeding will be applied using two methods. The first method will use a calibrated hand or “belly” spreader and mix the seed with clean masonry sand or inert bran fiber for better distribution. Immediately following application, the seed shall be lightly raked into the soil to a depth of 5 millimeters (maximum) using a steel rake. This method will be used for approximately 60% of the spineflower creation areas. The second method will use a seed imprinting device that has ripping teeth in front of the imprint wheel and a calibrated seed bin. This method shall be used for approximately 40% of the direct seeded area. This method mimics a natural disturbance situation and has proven to be highly effective for seeding native plants in non-irrigated situations. Imprints shall be parallel with the contours, “v” in shape, and between 3 and 4 inches deep. Imprinting teeth shall be offset to prevent channeling of water. Imprinting shall not occur on slopes steeper than 3:1. Imprinted areas shall be covered with blown straw certified as weed-free at the rate of 2,000 pounds per acre.

The rate of seeding will be dependent on the seed purity, percent germination, individual site conditions, and the quantity of seed available. Therefore, the seeding rate (to be expressed in pounds per acre) will be calculated by the project biologist and submitted to CDFG for review. Fifty percent of the seed shall be pretreated by clipping the seed coats, as previous studies (Sapphos 2001) have determined that germination rates were dramatically increased by clipping seed coats.

In areas where herbivores, including birds, are known or expected to be problematic, the seeded areas should include temporary exclusion fencing and/or bird deterrents, such as silver tape attached to posts, artificial owls, or other pre-approved devices. All spineflower direct seeding work shall be monitored and reported to CDFG.

Spineflower Conservation Plan December 3, 2010

10.5.3.2 Seed Banking from Preserves

Spineflower seed shall be collected from spineflower preserves. Seed collection shall follow the approved seed collection protocol described in the October 8, 2003, CDFG letter to Newhall Land authorizing collection of spineflower seed (CDFG 2003b). Two-thirds of the collected seed will be sent to RSABG for storage (one-third for short-term and one-third for long-term storage), and one-third will be sent to the USDA National Seed Storage Lab in Fort Collins, Colorado, for long-term storage. Approximately 5% of seed will be collected in each preserve area each year, only in years of within 20% of normal rainfall, or greater than normal, for 10 years, beginning in the year the preserves are established. Collected seed maintained at RSABG may potentially be used for seeding, as discussed in *Section 10.5.3.3*, below.

10.5.3.3 Potential Expansion of Preserve Populations through Seeding

Pending the outcome of the Salvage Seed Experimental Program, seeding of spineflower in the preserves may be performed to create additional spineflower occurrences. Direct seeding in a preserve area would only utilize seeds from that preserve area; it would not involve seeds collected from development areas or other preserves. Prior to utilizing banked seeds from any preserve, a direct seeding plan shall be developed for spineflower mitigation/creation areas that includes the following data:

1. Scaled topographic maps showing the accurate locations and acreages of the proposed seeding areas
2. A detailed description of proposed (site-specific) methodology
3. Name of biologist that prepared the plan
4. Map and description of the habitat(s) adjacent to the seeding area
5. List of plant species and densities present within the seeding area
6. The project schedule
7. Plans and specifications for site preparation, seed application, and maintenance methods developed from the salvaged seed experimental program (see Newhall Ranch Specific Plan EIR Mitigation Measure SP-4.6-78).

10.5.4 Spineflower Habitat Characterization Study

- The following are specific questions that will be addressed through a habitat characterization study to be undertaken upon issuance of a 2081(b) Incidental Take

Spineflower Conservation Plan December 3, 2010

Permit, and no later than two years after issuance, and prior to proposed development, at such time as favorable rainfall conditions occur.

- Are the distribution, abundance, and/or performance of spineflower (positively or negatively) correlated with the occurrence of:
 - One or more non-native plant species?
 - Guilds (or functional groups) of non-native plant species (e.g., annual grasses, annual forbs)?
 - Non-native plant species overall?
- What are the distribution and abundance of non-native plant species within occupied spineflower habitat?
- Are there any observable and consistent patterns in the occurrence of non-native plants and abiotic characteristics of the habitat (e.g., soil conditions) or disturbance (e.g., soil disturbances, time since fire) that might indicate the microhabitats in which non-native plants are most likely to occur in general and/or to compete with spineflower?

10.5.5 Centralized Information

Information sharing is a critical component of the adaptive management program. A Spineflower Information Center web site or File Transfer Protocol (FTP) server will be established to serve as a repository for annual work plans, monitoring data, and findings of Annual Program Reviews. Regional weather data, local weather information, and raw monitoring data will also be stored and accessible through the Spineflower Information Center. In addition, the Spineflower Information Center may also be configured to provide an Internet-based forum to facilitate discussion among Adaptive Management Working Group members outside of scheduled Annual Program Review meetings.

11.0 MONITORING ACTIVITIES

11.1 Qualifications

Monitoring shall be conducted under the direction of the preserve manager or the NLMO, as approved by the CDFG. The preserve manager, NLMO, and/or staff collecting data shall meet the qualifications described in *Section 9.0* and be familiar and experienced with the monitoring and data collection techniques outlined herein.