APPENDIX A.

Carlsbad OSMP Funding Analysis

City of Carlsbad Open Space Management Plan
Funding Analysis

Prepared for:

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I. Introduction

The City of Carlsbad's Habitat Management Plan (HMP) is an ambitious effort to conserve viable populations of over 41 plant and wildlife species that represent Carlsbad's natural heritage. At the same time it provides a blueprint for both conservation and development for other jurisdictions nation-wide for the foreseeable future. The HMP is thus a critically important plan for the City of Carlsbad's economic well being and maintenance of quality of life for its residents. However, without successful implementation, the HMP is no more than an expensive planning exercise. Implementation involves both converting lands at risk into a conservation ownership, and managing those lands to insure the threats to their ability to provide habitat for native animals and plants are controlled in perpetuity. While acquiring land for conservation is an important milestone, it is just the first step. Ultimately the success of the HMP will be measured by how well those threats to the land's natural integrity are managed or eliminated. This will be the most challenging, and perhaps in the long term, most costly aspects of the HMP, especially depending on who implements this plan and how funds are managed. An accurate forecasting of the implementation costs is thus essential, and with out that forecast there is no way to develop funding programs to insure that the benefits of this plan are realized.

The Carlsbad HMP covers a total of 7,135 acres of open space (5,748 acres of natural habitat) and is the MHCP subarea plan for the City of Carlsbad. In this draft document the Center for Natural Lands Management (CNLM, the Center) provides a realistic estimate for the costs of implementing the biological monitoring and management components of the Open Space Management Plan (OSMP), which includes 100% of the HMP area plus an additional 1,805 acres not included in the HMP. These estimates are based on over a decade of experience CNLM has in managing natural areas in California, and using the Property Analysis Record (PAR) software the Center developed exactly for this purpose. The PAR itemizes costs in a manner that allows an objective analysis over the cost estimates and a cost/benefit analysis for each line item as a contribution to the success of the HMP. The PAR also allows for inflation and insures that the "buying power" of each line item is maintained through time. The cost estimates included here are constrained by assumptions that are detailed below. Knowing these assumptions insures that debate and cost comparisons are consistent (comparing apples with apples).

CNLM encourages an open dialogue with the City of Carlsbad, the public and wildlife agencies regarding the cost estimates and identified tasks delineated in this document. Through that dialogue we hope to come to a consensus regarding both assumptions and the outline of implementation strategies. With that consensus a final, defensible, cost estimate can be developed.

II. Assumptions for Cost Analysis

This cost analysis incorporates several assumptions that were discussed and agreed upon between the Center, TAIC and the City of Carlsbad (City). Public meetings were held to solicit ideas and information useful to the cost analysis. Any changes to these assumptions would require a re-evaluation of the cost estimate.

Assumptions

<u>Land Assumptions</u>:

1. Total project acres: 7,135 acres of which 5,748 acres is considered natural.
2. Project Area: City owned open space + Biological management entity open space (e.g., CNLM) + Unassigned private open space + Portions of the standards areas of the HMP + Private open space (mainly HOA's) + State and Federal Wildlife Agency owned land.
3. 50 year permit- management in perpetuity
4. Taxes, district fees and other levies are the responsibility of the land owner and are not included in this analysis.
5. All stormwater conveyance structures will belong to the City, with open space managers having no responsibility of any kind for these structures.
6. Fuel management (Fire breaks between homes and preserve lands) is the responsibility of the developer/HOA/property owner and are not part of this analysis.

Funding Assumptions:

1. Funding will be through interest earned on endowments, grants and fees. City appropriations will be needed to fund management gaps.
2. Fuel management (Fire breaks between homes and preserve lands) costs are not included in analysis.
3. Management tasks and goals will follow the focused management issues report (TAIC), the MHCP, the final MHCP Monitoring and Management Plan and the Carlsbad HMP.
4. Cost analysis will be based on the General Management Entity level (of the focused management issues report).
5. Major lagoon management tasks, such as dredging, habitat restoration and creation, water quality analysis, sediment analysis or other such items is not included. Cost analysis focuses on monitoring tasks within this habitat community.

Biological Management and Monitoring Assumptions:

1. Monitoring guidelines based on Final MHCP Monitoring and Management Plan and the MHCP. Cost analysis based on the preserve level and sub-regional level of monitoring and management requirements of the NCCP.
2. Species included in the analysis include those proposed for coverage, those contingent on other MHCP Subarea Plans being Permitted and those Contingent on Funding for Management.
3. No wetlands will be created under this project, restoration is only a part of habitat enhancement.
3. Habitat enhancement includes fire, invasive exotic control and cowbird control.
4. The City is obligated to restore approximately 104 acres of coastal sage scrub habitat within the City; however, this restoration will be funded by the MHCP regional funding source and not undertaken until that funding source is established.
5. Annual reports will be provided to City by the individual management entities. The City will report to the wildlife agencies annually and cumulatively every three years.
6. Fencing and gating and their maintenance included in this analysis.
7. GIS coordination, data collection and analysis to be done by preserve staff. City and wildlife agencies are repository of data.
8. Habitat management requirements (as per PAR):
    a. Capital improvements (fences and gates)
    b. Biological monitoring
    c. Habitat maintenance (erosion control, fire management, non-native plant and animal control, etc)
    d. Public services (enforcement, outreach, recreation, etc)
    e. Reporting

Recreation Assumptions:

1. Public trails will be created under the supervision of management entities and will be composed of dirt and/or decomposed granite.
2. No motorized vehicles will be allowed within preserve areas.
3. No hunting, shooting or paint-ball combat will be allowed.
4. A few informational kiosks/or "nature" centers may be necessary, but their funding is not part of this analysis.
5. Recreation will be considered "passive" only, and will include hiking and wildlife viewing and mountain bike riding only in designated areas.

III. Cost Justification

The following cost justification is based on the assumptions outlined in the previous sections. The cost breakdown is divided into sections which are termed Capital Improvements, Biological Monitoring, Habitat Maintenance, Public Services, Reporting, Field Equipments and Operations. The dollar amount required for management is based on the following analysis, with each section header matching the PAR spreadsheet.

A. Capital Improvements

This section deals with the cost analysis estimated for fencing and gating. Each management entity will be responsible for these costs.

Fencing

Fencing will be an important aspect of land management, since unauthorized use can destroy sensitive resources. Several assumptions have been made for the cost analysis. Fencing discussed in this section is limited to the perimeter of preserve areas. Interior fencing, such as post and cable to keep people out of sensitive areas, is covered and included under the category of "Trails Maintenance" in the Public Services section of this analysis. The total perimeter of all parcels is about 231 miles. However, the entire perimeter of each parcel will not need to be fenced as there may be steep topography, homes, etc. Therefore, this cost analysis assumes that about 1/10 of the entire perimeter, or about 23 miles (121,440 linear feet) will need to be fenced in some fashion. A combination of smooth and barbed wire fencing, chain link, 6 foot post and cable, and other methods of fencing will be required for the preserve. The following table summarizes the breakdown of each category:

Breakdown of Fencing Requirements
(CNLM Cost)

% of Total Fencing	Type of Fence	Linear Feet	Cost per Linear Foot (Source)
60%	Wire fence: combo of barbed and smooth strand wire	72,864	$2.45 (Atlas Fence)
10%	Chain link, not coated	12,144	$9.85 (Atlas Fence)
20%	post and cable 6'-3 strand	24,288	$12.00 (Atlas Fence)
10%	other (bollards, boulder, etc)	12,144	$8.00 (Sustaaler)

Gates

Gates will be required to block necessary roads and allow access for the preserve managers and emergency services personnel. High quality pipe gates firmly planted into the ground are recommended since they are most resistant to vandalism and destruction. A typical pipe gate with one swinging arm that covers span of 16 feet will cost about $2,500 including installation (source: Atlas Fence). It is estimated that about 50 gates will be required for this project. These gates will need to be serviced annually and replaced every 20 years.

Maintenance

In addition to initial infrastructure costs, this cost analysis assumes yearly maintenance costs of fences and gates. Maintenance can be handled by site Rangers and/or others by fence contractors. It is assumed that about 10% of all fences and gates will be vandalized per year and require maintenance.

B. Biological Monitoring

This section deals with each aspect of biological monitoring outlined in the MHCP Monitoring and Management Plan (Plan). It summarizes the objectives and requirements of each type of monitoring task (i.e. vegetation, birds etc.), and estimates the number of hours required by management staff. In order to minimize confusion, and to simplify monitoring efforts, this analysis assumes the following breakdown in tasks:

1. Vegetation Community Monitoring
2. Vernal Pools
3. Plant Species Monitoring
4. Reptile and Amphibian Monitoring
5. Bird Monitoring
6. Mammal Monitoring
7. Invertebrate Monitoring
8. Abiotic Variables
9. Adaptive Management

Hourly estimates for each of the tasks discussed below is based on the field experience of CNLM preserve managers. Every attempt is made to be as accurate as possible. Data entry, analysis and reporting is assumed to take 25% of total field time for all tasks and is an estimate based on CNLM's experience.

NOTE: In some cases MHCP covered species are not known to occur within Carlsbad or only few individuals have been located. This cost analysis attempts to allow funding flexibility if unknown covered species or larger populations of known species are located in the future. Costs are either directly estimated within the task category, or can be taken from "adaptive management" or "contingency" funds.

Vegetation Community Monitoring

The MHCP Monitoring and Management Plan (Plan) calls for all vegetation communities to be mapped initially, and then every 5 years. The Plan does not identify more specific vegetation monitoring protocols in most vegetation communities. The Plan outlines vegetation monitoring for the riparian community; however, it directs these actions to specific locations in the MHCP area and none of these areas are within the City of Carlsbad. Therefore, this cost analysis includes the initial cost of mapping all vegetation communities and has this action repeated every 5 years. If we assume that 20 acres can be mapped per hour, then roughly 357 hours will be required every 5 years to map vegetation communities. The cost of acquiring new aerial photography every 5 years is included in the "Field Equipment" section of this document.

Vernal Pools

The MHCP Monitoring and Management Plan outlines monitoring protocols to measure hydrology and water quality variables within vernal pools (covered species monitoring cost justification provided in separate sections of this report). There are three vernal pool complexes in the Carlsbad area (Poinsetta Avenue, College Boulevard, and El Camino Real). The objectives of vernal pool monitoring are:

1. Monitor duration of inundation and develop a hydrograph of each pool.
2. Record area of inundation.
3. Record water quality variables including temperature, dissolved oxygen and conductivity in each pool.

This cost analysis assumes that it will require an average of six visits per vernal pool complex per year to monitor vernal pool variables (minimal monitoring required in low rain years, and more in heavy rain years.). Each visit will require 8 hours to measure all variables and note and report data (USFWS standard

field forms are filled out in the field and can be attached to annual reports). Therefore, 144 hours per year (8 hours per visit X 6 visit/site X 3 sites) will be required to measure vernal pool variables in Carlsbad.

Vegetation Community Monitoring
Summary of Personnel and Hours

Personnel/Tasks	**Hours**
Plant Ecologist / vegetation mapping every 5 years	357 hrs/ 5 years
Vernal Pool Biologist / measure vernal pool variables	144 hrs/ year
Plant Ecologist / data entry and reporting*	89 hrs/ year

*based on 25% of the total field hours.

Equipment required for vegetation monitoring and vernal pool water analysis includes aerial photographs, temperature gauges and water quality meter, depth rulers, transect tapes.

Plant Species Monitoring

Coastal Sage Scrub, Chaparral and Grassland Vegetation Communities

The following plant species are considered covered by the MHCP and/or the HMP and are found within the coastal sage scrub, chaparral and grassland communities:

San Diego throrn-mint	*Acanthomintha ilicifolia*
San Diego Ambrosia	*Ambrosia pumila*
Thread-leaved brodiaea	*Brodiaea filifolia*
Orcutt's spineflower	*Chorizanthe orcuttiana*
Del Mar Mesa Sand Aster	*Corethrogyne filaginifolia* var. *filaginifolia*
Short-leaved dudleya	*Dudleya blochmaniae* ssp. *blochmaniae*
Del Mar manzanita	*Arctostaphylos glandulosa* ssp. *crassifolia*
Encinitas baccharis	*Baccharis vanessae*
Wart-stemmed ceanothus	*Ceanothus verrucosus*
Summer holly	*Comarostaphylis diversifolia* spp. *diversifolia*
Sticky dudleya	*Dudleya viscida*
Cliff spurge	*Euphorbia misera*
San Diego barrel cactus	*Ferocactus viridescens*
Nuttall's scrub oak	*Quercus dumosa*
Torrey pine	*Pinus torreyana* ssp. *torreyana*
San Diego goldenstar	*Muilla clevelandii*

The distribution and abundance for each sensitive plant species as described in Carlsbad's HMP is taken into consideration to generate the necessary field hours to complete each monitoring task. In some cases, species have not been found within Carlsbad. The hourly estimates provided below should allow for sufficient time to monitor newly discovered populations or species. Additional funding can also be drawn from contingency or adaptive management allocations.

A. Covered plant species monitoring objectives include:

1. Annually track the distribution of the San Diego thornmint, San Diego Ambrosia, Orcutt's spineflower, and Del Mar mesa sand aster. Also, map and quantify population densities of these species.

2. Determine the distribution and abundance of Del Mar manzanita and Encinitas baccharis every 5 years.
3. Annually conduct presence-absence surveys for wart-stemmed ceanothus, summer holly, Blochman's dudleya, sticky dudleya, cliff spurge, San Diego barrel cactus, Nuttal's scrub oak and torrey pine. .

The MHCP Monitoring and Management Plan calls for annual monitoring for plant species listed in A1. The most common species within this list is the San Diego thornmint. The other species either are rare and may not occur in Carlsbad. This cost estimate estimates that 80 hours of field time will be required per year to quantify the population sizes of these plant species

The Plan outlines a simple inventory effort for plant species listed in A2. Each of these species is to be monitored every 5 years at which time each population size is estimated and their distribution is mapped. This cost estimate assumes that 40 hours every 5 years will be required for this task.

The Plan calls for annual presence-absence surveys for species listed in A3 that were not also listed in A1 or A2. Most of these plant species are perennial so there are few monitoring constraints. This cost analysis assumes 80 hours per year will be required for this task.

Riparian Vegetation Communities

The following plant species is considered covered by the MHCP and/or the HMP and are found within riparian vegetation communities:

San Diego Marsh-elder *Iva hayseiana*

A. Covered plant species monitoring objectives include:

1. Annually track the population of San Diego Marsh-elder.

This cost estimate assumes that 40 hours per year will be required to survey for San Diego Marsh-elder.

Oak Woodland

The following plant species is considered covered by the MHCP and/or the HMP and is found within the Oak Woodland community, but is not known to occur within Carlsbad: Surveys for this species will be included in this analysis because individuals may be found or reintroduced in the future.

Engelmann oak *Quercus engelmannii*

A. Covered plant species monitoring objectives include:

1. Annually monitor the populations of Engelmann oak.

This cost estimate assumes that 25 hours per year will be required to monitor Engelmann Oak.

Vernal Pools

The following plant species is considered covered by the MHCP and/or the HMP and is found within the Vernal Pool community:

Thread-leaved brodiaea	*Brodiaea filifolia*
San Diego button celery	*Eryngium aristulatum* var. *parishii*
Little mousetail	*Myosurus minimus* ssp. *apus*
Spreading navarretia	*Navarretia fossalis*
California Orcutt grass	*Oructtia californica*

A. Covered plant species monitoring objectives include:

1. Annually monitor the populations of covered and narrow endemic plant species within the vernal pool community.

The Plan requires annual monitoring of sensitive plant species found in vernal pools. There are only three vernal pool complexes in the Carlsbad area, which will not require a large monitoring effort. This cost analysis assumes that 80 hours per year will be required for vernal pool plant monitoring.

Equipment required for plant species monitoring includes transect tapes, and PVC pipe (for quadrats).

Plant species management and conservation

Although no specific plant management and conservation actions are detailed within the MHCP Monitoring and Management Plan or HMP, it is assumed that sensitive plant species populations will need to be enhanced created, and/or restored. These actions will require seed collection, plant propagation, site evaluations, planting and monitoring. This cost estimate assumes that 300 hours per year will be required for plant management and conservation. Weed maintenance costs of any enhancement activities is covered within the non-native plant removal section of this document. It is assumed that soils will be taken from existing preserve areas.

This cost analysis assumes that plant propagation will be contracted out to a plant nursery and assumes an average price of about $4.00 per plant (as per RECON Environmental Inc, pers. comm.). An estimated 1000 plants will need to be propagated annually, or about $4,000 (this cost is included in the "Habitat Maintenance" section of the PAR).

Seed banking is covered in the Habitat Maintenance section of this report.

Plant Monitoring Summary of Personnel and Hours

Personnel/Tasks	**Hours**
Botanist / Annual monitoring of covered species	345 hrs/ year
Botanist / monitoring of Encinitas Baccharis and Del Mar manzanita	40 hrs/ 5 years
Botanist / Plant species management and conservation	300 hrs/ year
Botanist (data analysis and reports)*	163 hrs/yr

*based on 25% of field time

Reptile and Amphibian Monitoring

Amphibians

The Carlsbad HMP list does not specify any covered amphibian species. The arroyo southwestern toad (*Bufo microscaphus californicus*) and southwestern pond turtle (*Clemmys marmorata pallida*) were originally considered, but both of these species are not known to occur in Carlsbad and thus were not covered. Another sensitive amphibian species, the western spadefoot toad (*Scaphiopus hammondii*), will not be covered by the HMP, but is mentioned in the MHCP Monitoring Plan as a species to be monitored. Western spadefoots have been found at Box Canyon, (Spiegelberg (CNLM), pers. comm.). This cost analysis assumes annual monitoring for only the western spadefoot toad and does not include the arroyo

southwestern toad or southwestern pond turtle because they do not occur in Carlsbad and are unlikely to occur due to lack of suitable habitat.

The objective for the amphibian monitoring program is to:

1. Monitor vernal pool areas for the presence-absence of western spadefoot toads.

This cost analysis assumes that 60 hours per year will be required to survey Carlsbad's vernal pools for western spadefoot toads. Additional survey data for spadefoot toads is likely to be collected from the reptile arrays (see below). In addition, these reptile arrays should also capture non-covered amphibian species, such as salamanders and tree frogs.

Other amphibian species that will require monitoring are the non-native bullfrog, and African clawed frogs (see exotic species monitoring in MHCP monitoring Plan). The bullfrog is known from San Marcos Creek (CNLM, pers. comm.) and may occur elsewhere. These species will need to be removed if possible.

Equipment needed for spadefoot toad monitoring will include dip nets.

Reptiles

One reptile species is covered under the MHCP, the orange-throated whiptail. However, other reptile species that are considered sensitive may occur, such as the coast horned lizard, and thus will require some level of monitoring. The MHCP monitoring plan calls for mapping sensitive species as they are observed during surveys, and also to construct pit-fall arrays in certain locations in north county San Diego. Pit-arrays will not only capture sensitive species, but will address most of the reptile community.

A. Objectives for this monitoring and management program are to:
   1. Monitor for herpetofauna at selected upland areas using pit-fall arrays (sub-regional monitoring and management.
   2. Note the presence of sensitive or covered reptile species during other surveys (i.e. during bird surveys)

The MHCP Monitoring Plan calls for pit-fall arrays to be constructed at the La Costa/University Commons Area, the Calavera Lake/Carlsbad Highlands area in Carlsbad and "stepping stone" habitat in Carlsbad (A1). The Plan calls for a minimum of 10 pit-fall arrays at each location (stepping stone areas need to be determined and may be spread across the city). The Plan calls for two trapping periods to be conducted every other year. Each trapping period is 5 days in length. This cost analysis assumes that each set of ten arrays can be checked by two people in one day. Therefore, a total of 10 days per person per survey year will be required for each location, or 30 days per person per year (60 days for two people per year). A total of 480 hours will be required every other year for pit-fall array monitoring.

The cost analysis also includes the cost of installation and maintenance of the pit-fall arrays (see field equipment). The total labor involved in installation is estimated at about 5 days for 10 pit-fall arrays, or 15 days total for all arrays. This is equivalent to 120 hours. 40 hours per year are allocated for maintenance.

This cost analysis does not include additional time to note the presence-absence of sensitive reptile species (A2), as these hours will be covered by other monitoring actions (i.e. during bird surveys)

Reptile and Amphibian Monitoring
Summary of Personnel and Hours

Personnel/Tasks	**Hours**
Herpetologist / Pit-fall arrays	480 hrs every 2 years
Pit-array installation, maintenance	120 hrs 1st yr, 40 hrs/yr
Herpetologist / Spade-foot toad	60 hrs/yr
Herpetologist / data analysis and reporting*	75 hrs/yr

* based on 25% of total field time

Field equipment required includes 5 gallon buckets, drift fencing, sponges (for each bucket) and miscellaneous array construction supplies.

Bird Monitoring

Seventeen bird species are identified in the HMP for inclusion as covered species. These species inhabit several different vegetation communities and are many times widespread across the proposed conservation area. Federally and state-listed species include the coastal California gnatcatcher (*Polioptila californica californica*), the least Bell's vireo (*Vireo bellii pusillus*), and the southwestern willow flycatcher (*Empindonax traillii extimus*). Other important species include the peregrine falcon (*Falco peregrinus anatum*) and Cooper's hawk (*Accipiter cooperii*). In general, birds fall into the categories of resident passerines, neo-tropical migrants, raptors and aquatic (open water, fresh water marsh etc) species.

The MHCP Monitoring and Management Plan outlines a strategy for avian monitoring based on single species and community level management. Therefore, bird surveys will include focused surveys for species such as the gnatcatcher and community level surveys for birds found in specific habitat types such as coastal sage scrub.

This cost analysis assumes that no additional funding will be required for the monitoring of other bird species that are not covered by the HMP, but are listed as covered by the MHCP. Many of the latter species can be located during monitoring efforts outlined below and no additional survey time will be required.

The following breakdown was used to calculate the number of hours needed to complete bird surveys.

Coastal California gnatcatcher, coastal cactus wren and the coastal sage scrub, chaparral, and grassland communities

A. Covered bird species monitoring objectives include:

1. Annually monitor for the presence of coastal California gnatcatchers and coastal Cactus wren (cactus wren is not covered by the HMP, but is included in this analysis).
2. Annually monitor for the presence of other covered species (i.e. rufous-crowned sparrow and golden eagle).

B. Avian coastal sage scrub community monitoring objectives include:

1. Monitor the avian bird community to determine species richness and changes over time, and to determine relative abundance at specific locations throughout the reserve.

The PAR budgets assumes (as per the Plan) that monitoring for gnatcatchers and cactus wrens (A1) will include five site visits per year (as per USFWS 2004 HCP survey requirements) with at least a 7 day interval between visits. The PAR budget uses both the coastal sage scrub and coastal sage scrub/chaparral acreage, or about 2,109 acres for the analysis and that both species can be monitored concurrently (far fewer acres of cactus wren habitat than gnatcatcher habitat within Carlsbad's coastal sage scrub). The PAR budget assumes that each surveyor can cover about 100 acres of coastal sage scrub per survey day and that roughly 105 days/year will be required for these surveys (21 days/survey area X 5 survey areas/ year) which is equivalent to about 840 hours/year (8 hours/day X 105 days/year).

The PAR budget assumes that monitoring for other covered species (rufous-crowned sparrow and golden eagle) within the coastal sage scrub (A2) will occur concurrently with the gnatcatcher and cactus wren surveys, so no additional time will be required. However, additional time will be required for these species in the chaparral and grassland communities (chaparral, grassland, southern maritime chaparral) which include a total of 1,763 acres. The PAR budget assumes that each surveyor can cover about 150 acres of these habitat types per day and that roughly 36 days per year will be required for these surveys (12 days/survey area X 3 survey area/year) which is equivalent to about 288 hours per year (8 hours/day X 36 days/year). These hours should be sufficient regardless of what methodology is being used (i.e., point counts, transects, etc)

For the avian community monitoring within coastal sage scrub (B2), the Plan specifically notes the La Costa Villages Management Unit, the Calavera Lake/Carlsbad Highlands area and "Stepping-stone coastal sage scrub habitat through Carlsbad" as target locations. The total acreage used for this analysis will be based on 560 acres for the La Costa Villages MU, 378 acres for the Calavera Lake/ Carlsbad Highlands area and 1/3 of the remaining coastal sage scrub areas or about 353 acres for "stepping stone" areas. This equates to a total of 1,291 acres of coastal sage scrub for "community monitoring." The PAR budget assumes that a point count methodology will be employed and that about 250 acres can be surveyed per day. This will require about 5 days of surveys per survey area and will be repeated five times per year within the spring months for a total of 25 survey days or about 200 hours/year.

California Gnatcatcher Dispersal

The Plan mentions the need to study dispersal of California gnatcatcher within several locations in north San Diego County, including the La Costa Villages, Calavera Hills and "stepping stone" locations in Carlsbad. Unfortunately, no detailed methodology is provided. Therefore, the following assumptions are made:

1. Banding efforts will include banding adults and fledglings (not nestlings) and will focus on the above listed areas (stepping stone areas to be determined).
2. Since all suitable gnatcatcher habitat will be surveyed annually, no additional survey time is required to find gnatcatcher pairs or to locate banded birds. However, extra time will be required to locate family groups and read color bands.
3. Banding efforts will continue for three years followed by three years of "re-location". After a six-year period, banding efforts will continue for another three years followed again by three years of "re-location." This cycle will repeat itself every six years.

Therefore it is assumed that about 100 days per year will be required for banding efforts, including time for locating family groups and reading color bands. This equates to about 800 hours per year (2,400 hours total over three years; 100 days/year X 3 years X 8 hours/day). (It is assumed that about 25 family groups will be banded).

Least Bell's vireo, southwestern willow flycatcher, yellow-breasted chat, Cooper's hawk and the riparian and oak woodland vegetation communities.

A. Covered bird species objectives within the riparian community include:

1. Annually monitor for the presence of least Bell's vireo, southwestern willow flycatcher, yellow-breasted chat and Cooper's hawk.

2. Nest monitor populations of least Bells' vireo and southwester willow flycatcher to determine brown-headed cowbird parasitism rates.

The PAR budgets assumes (as per the Plan) that monitoring for covered riparian bird species (A1) will include three site visits per year with at least a 7 day interval between visits. The PAR budget uses the riparian scrub, woodland and forest, and oak woodland acreage, or about 520 acres for the analysis and that all species can be monitored concurrently. The PAR budget assumes that each surveyor can cover about 50 acres of riparian habitat per survey day and that roughly 30 days/year will be required for these surveys (10 days/survey area X 3 survey/year) which is equivalent to about 240 hours/year (8 hours/day X 30 days/year).

The Plan also discusses the need to study certain populations of covered riparian bird species, including detailed nest monitoring to study covered species population demographics and cowbird parasitism as well as vegetation change analysis. The Plan does not identify areas of study within the Carlsbad area for these types of study. However, the Plan specifies that cowbird trapping should be initiated if parasitism rates for the vireo and flycatcher exceed 10%. There are no recorded flycatcher locations in Carlsbad and only few vireo locations (2 pair reported as of 2001, B. Kus, USGS pers. comm.). Therefore, this analysis will assume that 15 pair of vireo (and any flycatchers) will be monitored annually for cowbird parasitism (since there is more potential habitat). Each pair will be visited twice per month from March 15 to July 15 (4 months), or about 8 visits total. Five pair of vireo (or flycatcher) will be visited per day. Therefore, about 24 days or 192 hours will be required annually to nest monitor vireos.

<u>California least tern, western snowy plover, Belding's savannah sparrow, large-bill savannah sparrow, light footed clapper rail, and other covered species within the lagoon environment</u>

A. Covered bird species objectives within the lagoon community include:

1. Annually conduct surveys for California least tern and western snowy plover.
2. Annually conduct surveys for Belding's savannah sparrow.
3. Annually conduct surveys for Large-billed savannah sparrow if species is found to be present
4. Annually conduct surveys for light-footed clapper rail.
5. Annually map the location and distribution of other covered (non-shorebird or waterfowl) avian species within the lagoon environment.
6. Annually survey for waterfowl and shorebirds in appropriate habitat.

The Plan calls for annual surveys in the month of April for California least terns and western snowy plovers (A1). Goals are to map locations of birds and record number of breeding pairs. Monitoring for nest productivity of these species is also outlined in the Plan, but only if funding is available. This cost analysis only covers annual surveys within the month of April. This cost analysis assumes that two surveyors can accomplish these goals with 12 visits each within the month of April, or 24 days total. This equates to 192 hours per year.

The Plan calls for annual surveys in the month of March to determine the number of breeding Belding's savannah sparrow (A2). There is approximately 137 acres of suitable habitat within Carlsbad for this species. This cost analysis assumes that two surveyors can monitor for the Belding's savannah sparrow with 8 visits each within the month of March, or a total of 16 days total. This equates to 256 hours per year.

The Plan calls for annual surveys for large-billed savannah sparrow (A3). If the species is found to be present, surveys will continue annually. This species occurs within the salt marsh habitat or about 137 acres within Carlsbad. Surveys occur in the month of January. This cost analysis assumes that two surveys can monitor for large-billed savannah sparrow with 8 visits each within the month of January, or a total of 16 days total. This equates to 256 hours per year.

The Plan calls for annual spring counts for clapper rails at each lagoon and appropriate habitat between March and May (A4). This species is found within the salt marsh habitat or about 137 acres within Carlsbad. This cost estimate assumes weekly visits to both the Agua Hedionda lagoon and the Batiquitos lagoon from March to May. Protocol surveys call for monitoring periods to include the early morning (two hours after sunrise) and late afternoon (two hours before sunset). This cost analysis assumes that both morning and afternoon surveys will be conducted requiring 6 hours per day. Therefore, a total of 12 visits per area will be required, or 72 hours per area for a total of 144 hours for clapper rail surveys per year.

The Plan does not specify monitoring protocols for other covered avian species within the lagoon community, such as the brown pelican, white-faced ibis and peregrine falcon (A5). Therefore, this cost analysis will make some assumptions for survey method and time required. It is assumed that 6 surveys per year (3 spring and 3 fall) per lagoon area will be required and that each lagoon will need to be broken down into two units for a total of 12 survey days per lagoon or 24 days total. Therefore, 192 hours per year will be required for these bird species.

The Plan calls for annual surveys once in the winter and once in late summer for shorebirds and waterfowl (A6). This cost analysis assumes that the Lagoons will be broken down into four units each with each unit requiring one day for surveys per period (winter and late summer). Therefore, 16 survey days will be required, or the equivalent of 128 hours per year for shorebird and waterfowl surveys.

The Plan also calls for estimating the mammalian and avian predator activity at each lagoon. This cost analysis assumes that these measures can be taken within the time periods allocated for all surveys. Therefore, no additional hours are required.

Bird Monitoring
Summary of Personnel and Hours

Personnel	Hours
Ornithologist (CSS, chaparral and grassland)	1,328 hrs/year
Ornithologist (Riparian habitats and oak woodland)	240 hrs/year
Ornithologist (Vireo and flycatcher nest monitoring)	192 hrs/year
Ornithologist (Lagoons)	1,168 hrs/year
Ornithologist: (Data Management/Report Writing for non-banding field work)*	732 hrs/year
Ornithologist (banding studies)	2,400 hrs/ across three years
Ornithologist (Data Management/Report Writing for banding studies)**	240 hrs/year

*based on 25% of total monitoring hours; ** based on 10% of total banding hours

Equipment needs for bird surveys include handheld computers, GPS, tape player and binoculars.

Mammal Monitoring

There are no species of mammals that are considered covered under Carlsbad's HMP. Therefore, it is assumed that no focused surveys for regionally sensitive or MHCP Species will be required. However, the MHCP Monitoring Plan does call out for wildlife corridor studies, which are included in this analysis.

Wildlife Corridors

As per the Plan, each critical wildlife corridor "pinch-point" or underpass as outlined in the Plan will need to be monitored for wildlife movement. This would cover the mule deer and mountain lion (and of course many other species, such as bobcat, raccoon, skunk etc). Track stations and remotely triggered camera stations will be used at each station and sampled for two 5 day periods during each year. There are 8 "pinch-point" or underpass locations identified in the Plan as being located in Carlsbad. Therefore, 10 days per point will be required per year, or 80 days total. This is equivalent to 640 hours per year.

Total hours required for this effort is provided in the following table:

Mammal Monitoring
Summary of Personnel and Hours

Personnel	**Hours**
Mammalogist (wildlife corridors)	640 hours/yr
Mammalogist Data Management/Report Writing*	160 hours/year

Based on 25% of wildlife corridor working hours

Equipment needs for mammal work includes small mammal traps, bait, remote cameras, and tracking station chalk.

Invertebrate Monitoring

Five invertebrate species are considered covered by Carlsbad's HMP, the Harbison's dun skipper, the Hermes copper, the Riverside fairy shrimp, the San Diego fairy shrimp, and the salt marsh skipper. However, only three of the species, both fairy shrimp and the salt marsh skipper are known to occur and the others are not likely to occur (HMP, 1999). At this time, only the vernal pools on Poinsettia Lane are known to have San Diego and Riverside fairy shrimp, although the other vernal pool locations have the potential to support these species.
Objectives for invertebrate species include annual monitoring and habitat assessments. Habitat assessments for these species is included in the vegetation monitoring section of this document.

Fairy Shrimp

Management of fairy shrimp populations will focus on management of the vernal pool watersheds. Watershed management will include weed control and soil and water quality monitoring (see other sections for these details). All vernal pools will be sampled annually. USFWS protocols will be following for these surveys (i.e. includes measuring pool temperature, depth etc). This cost analysis assumes that 5 survey days will be required per pool complex each year, or a total of 15 days. This equates to 75 hours per year for fairy shrimp surveys.

Hermes Copper

Hermes Copper is not known or expected to occur in Carlsbad nor is there suitable habitat. Therefore, no funds are allocated to management of this species in Carlsbad.

Harbison's dun skipper

There are no documented locations of Harbison's dun skipper in the City of Carlsbad. However, suitable habitat is likely to occur. This species is found in riparian areas where its larval host plant San Diego sedge (*Carex spissa*) is present. Surveys for this species should begin with survey for its larval host plant. If the host plant is located, adult surveys should be initiated. Surveys for the dun skipper and its host plant are estimated to require about 60 hours per year.

Salt Marsh Skipper

The salt marsh skipper is likely to occur in the salt marsh areas of Carlsbad. Annual surveys for this species are required. There are 137 acres of salt marsh within the City. This cost estimate assumes that 3 surveys per year will be required per year and that a surveyor can cover 40 acres per day. Therefore, roughly 10 survey days will be required, or 80 hours per year.

Invertebrate Monitoring
Summary of Personnel and Hours

Personnel	Hours/Year
Entomologist fairy shrimp surveys	75 hours/ year
Entomologist Salt marsh skipper and Harbison's dun skipper	140 hours/ year
Entomologist (data analysis and reporting)*	54 hours/ year

*Assumed at 25% of total field time.

Equipment required for insect work includes dip net, vials, alcohol and hand lens.

Other Insects

Southern California has seen many harmful and potentially harmful non-native insects introduced during the past century. Two species that are most threatening to native species include the red imported fire ant and the Argentine ant. Both species are associated with human activities and are particularly problematic in the more urbanized areas. As the City of Carlsbad becomes more urbanized and much of the reserve lands effectively become islands within an urban matrix, the threats from these two ant species will grow. These ants are capable of eradicating native insect fauna, as well as causing severe negative impacts on reproductive success of ground and near-ground dwelling birds and reptiles. Monitoring for these ant species, in conjunction with monitoring the native ant fauna, will be used as one measure of the impacts of urbanization and habitat fragmentation on the ecosystem condition within the reserve system.

The MHCP calls for general visual surveys for the presence of non-native ants. However, these surveys should be coupled with some kind of formal survey method. Therefore, this cost analysis assumes that general visual surveys will be conducted in addition to more detailed sampling using pit-fall traps. Ants will be monitored using pitfall traps arranged in a subset of reserve parcels, concentrated in urbanized areas and large reserve systems. A total of 200 hours per year is dedicated to monitoring ant populations using general surveys and pit-fall traps.

Other Insect Work
Summary of Personnel and Hours

Personnel	Hours
Entomologist (ant surveys)	200
Entomologist (data analysis and report writing)*	25

*based on 25% of the field time

Equipment required for insect work includes microscope (1), micro-dissection kit, alcohol, pins (500/year), vials (250/year), jars, and pitfall traps (250/year).

Abiotic Variables

Climate

The MHCP Monitoring Plan finds that no additional in field weather information will need to be collected and that data can be collected from existing weather stations in the area. However, some time will be needed for data analysis purposes. This cost estimate assumes that 50 hours per year will be required to assimilate and store weather data and to conduct appropriate analyses.

Adaptive Management

Inventory and monitoring are used to track the condition of targeted habitats and populations relative to the ecological goals that have been set for them. Adaptive management is a process whereby evaluation of monitoring results are compared to the goals or defined "measures of success" so that management practices can be changed or modified as needed.

There are several ways to establish a cost for adaptive management. CNLM has included adaptive management costs in two ways. CNLM has asked clients for a one time fee up front which is invested and held until needed, or has included the cost as a yearly fee that can be set aside or spent as necessary (both are considered different from "contingency" as contingency should be used for unforeseen costs while adaptive management is a crucial part of ongoing management). This cost analysis assumes a yearly adaptive management cost will be required and assumes that it will be 10% of the total cost of all ongoing biological monitoring.

Science Oversight

This cost analysis assumes 500 hours per year for Science Oversight by a Science Director or experienced ecology professional.

C. Habitat Maintenance

Habitat maintenance includes tasks that are associated with enhancing and protecting existing habitat within the preserve from threats such as non-native plants and animals and erosion. Habitat restoration, which is not part of this cost analysis, involves more tasks and work than maintenance and includes tasks such as plant propagation, irrigation, invasive control and monitoring. The following sections outlines a cost justification for non-native plant and animal control, cowbird trapping, and non-native ant control and management, as these threats are the most commons to the preserves and are outlines several times in the MHCP Monitoring Plan. This section also includes a seed banking provision, as seed banking will be an important management tool and is mentioned as a necessity in the MHCP and MHCP Monitoring and Management Plan.

Non-native plant removal and non-native animal control

Non-native plant removal

This cost analysis assumes that there will be many parcels with non-native plant disturbance, that many parcels will be invaded by non-native plant species in the future, and that non-native plant removal will most likely be a continual process in perpetuity. The common non-native plant species in the dominant

habitats (coastal sage scrub, grassland and chaparral) are usually non-native grasses, mustard (*Brassica* ssp), thistle (*Centaurea melintensis*) and of course, many others. Non-native plant species that are likely to occur in riparian areas include arundo (*Arundo donax*), pampas (*Cortaderia selloana*) and acacia (*Acacia* spp.).

Since non-native plants are likely to always be an issue to some degree, this PAR analysis assumes a upfront cost (I and C) and then ongoing maintenance (ongoing). This analysis assumes that a small staff of laborers will be needed either seasonally or full-time for the duration of management. Approximately 300 hours a year would need to be dedicated to a botanist or plant ecologist, who determines which areas need non-native plant removal work. This botanist would then have a staff of up to 5 laborers whose job is to remove the non-native species (8,900 hours total per year). Alternatively, the money needed for the laborers could be used to hire a non-native plant removal contractor. Regardless, the PAR budget reflects the need for a non-native plant removal staff. These laborers can also be used for other habitat maintenance tasks, such as planting sensitive plant species as part of the plant conservation plan or erosion control.

Non-natives are a particular problem for several listed plant species, such as the San Diego thornmint and thread-leaved brodiaea. These locations will require measurements of native vs. non-native cover and frequency and will involve very careful and surgical removal process. Time and cost required for cover analysis is described in the plant species monitoring and management section of this report.

This cost estimate does not include the removal of the non-native plant species *Caulurpa taxifolia* which is currently being removed from Agua Hedionda Lagoon and is known to be a large problem worldwide. Cost estimates for surveys of this species were estimated by Merkel and Associates for the Center and totaled about $600,000 per year for presence-absence monitoring (per Lagoon). Maintenance and removal costs were estimated at $10,000 per incidence. As per Merkel and Associates, the State Regional Water Quality Control Board and California Coastal Commission are providing removal grants and funding for this task.

Non-native Plant Removal
Summary of Personnel and Hours

Personnel	Hours
Plant ecologist/Botanist (coordination)	300 hours/year
Technicians/laborers (3 full-time)	8,900 hours/year

Equipment needs for non-native removal include weed-whips, gardening tools, chain saws and other tools. The budget includes the rental of mowers for removal of non-native grasses.

Brown-headed cowbird trapping

Brown-headed cowbirds are known to cause declines in nesting success of many bird species. To counter this problem, biologists have created cowbird traps, which significantly reduce rates of parasitism. In San Diego County, cowbirds tend to flock around farmlands and agriculture and thus impact habitat areas near these human resources. It is very likely that cowbird trapping programs will be a necessary management tool during the bird breeding season for some locations within Carlsbad's reserve (i.e. Macario Canyon). The PAR assumes that approximately 10 will need to be purchased or constructed and replaced every 5 years (or about 1 trap per 50 acres of riparian habitat). The estimate assumes that these traps will need to be manned 7 days a week for up to 5 months out of the year, for a total of 1,120 hours (56 hours/week x 20 weeks= 1,120 hours) per person. The budget includes the cost of bait and other supplies needed for cowbird trapping.

Brown-headed Cowbird Trapping
Summary of Personnel and Hours

Personnel	Hours
Ornithologist (supervision)	40 hours/year
Technicians/Assistant Preserve Managers	1,120 hours/year
Reporting	40 hours/ year

Non-native ant species

The cost justification for monitoring non-native ant species is covered in the Entomology section of this report. Once the distribution and abundance of non-native ant species is determined an eradication method will need to be employed. There are several methods, and most require killing ants with basic traps, poisons or manual removal. The labor hours for such ant removal efforts can be drawn from the labor hours used for non-native plant control. Therefore, no additional hours are required.

Fire and Fuel Management

Fuel Management

As per the assumptions given to CNLM, no fuel management between preserve land and homes is part of this cost analysis.

Fire Management

Fire management is a critical component to all management efforts in natural landscapes. To be in compliance with the HMP, the City of Carlsbad will need to update fire management policies for its natural open space areas. Updated policies should include measures to avoid destruction of sensitive plant species populations, to create fire management zones, to educated fire control personnel, etc. This cost estimate includes the cost of renting heavy machinery to cut fire breaks (see equipment cost section), since it is likely that fuel breaks will be required in some portions of the preserve system. However, all costs associated with updating policies will be borne by the City and is not part of this analysis.

Erosion Control

Erosion control for this cost estimate is meant to cover relatively "small" erosion control problems. For example, erosion repairs along degraded habitat or near unused or old trails. It does not include the construction of erosion control devices, such as cement berms or culverts, or any measures that would require permits, engineering and major contracting. This cost estimate assumes that most erosion control measures will include sand bags or similar erosion control measures and will require the work or equivalent cost of about 1 full-time person (1,780 hours)

Seed Banking

The MHCP and MHCP Monitoring and Management Plan briefly state the need for seed banking as part of an overall plant conservation and management strategy. The cost for seed banking will depend on the number of species and seeds collected per species. The cost for long term (indefinite) seed storage at the Zoological Society of San Diego's Botanical Conservation Center is $2500 per accession. This cost estimate assumes that 4 accessions will be required in the first 10 years of management and then 1 accession per 15 years will be required in perpetuity. The cost includes seed viability testing and initial processing, but assumes that staff biologists will collect all seed material in the field.

D. Public Services

Patrolling, Trespass and Recreation Enforcement

The most prominent and deleterious threats to the natural resources in the City of Carlsbad is the direct impacts of human activities, particularly illegal off-highway vehicle (OHV) trespass. To a lesser extent, direct impacts from off-trail activities by otherwise legal public users of the reserve lands threaten the integrity of the habitats and sensitive species that rely on those habitats. Negative impacts from these activities have the potential to cause significant drains on financial resources intended for management of the biotic resources if the illegal activities are not prevented and controlled. Fences and signs alone will not deter trespass. Prevention will require a highly visible presence of a security force. In addition to contributing to the species and habitat conservation goals of the MHCP, a strong security presence also enhances the experience of the public legally using the reserve system and enhances the quality of life for residents of neighboring properties.

This cost analysis accounts for one full-time supervising officer and four full-time rangers/officers with law enforcement training to effectively enforce applicable state laws and safety in the various lagoons and open spaces in Carlsbad (as per conversation with and recommendation by Lt. Mike Ference, CDFG, and Supervising officer Dave Felt of the City of Carlsbad). The Rangers will coordinate with law enforcement agencies, including the City of Carlsbad's Sheriff's Department, Department of Fish and Game Wardens, and city police and parks officers. All staff vehicles will be equipped with radios and/or cellular telephones to report trespass and vandalism to security personnel or the Sheriff's Department.

The Security staff will also be responsible for directing maintenance crews to points of illegal entry, and will coordinate the language on boundary signs. Rangers will have the responsibility to coordinate with the City Parks Department to identify multi-use areas and associated restrictions. These restrictions will be preserve area-specific and in some cases will be seasonal around periods of sensitive species activity. Rangers will work with the GIS and database management staff to maintain accurate overlays and information files that identify and distinguish between public-accessible and public-inaccessible areas.

Trail Maintenance

The cost analysis assumes that 68 miles of trail exist or are planned within the City of Carlsbad's reserve system (as per "Carlsbad Avenue" brochure published by City of Carlsbad). This cost analysis assumes that maintenance of unimproved trails will cost about $4,000/mile (quote as per Fred Burnell, City of Carlsbad Parks Supervisor) and that 20% of the trails will be maintained annually.

Signing

Various signs will be needed for access control, public information and education. Small (24 inches by 24 inches), general signs such as "Habitat Conservation Area", "No Motorcycles", and "No Trespassing" will be required for almost all preserves. Larger, or more prominent preserves will require larger redwood signs for the public benefit. The number of signs required per site will vary on access limitations and proximity to urban areas. Small sites near homes may require many signs along the perimeter, while larger sites far from urban areas will likely only need a few signs at main access points, or along fence lines. This analysis assumes that some general signage (i.e. "Habitat Conservation Area" etc) will be needed of the total perimeter of all the parcels (231 miles) and at every 300 foot intervals. This would result in needing about 4,065 signs. This analysis also estimates that 1000 miscellaneous signs ("no motorcycles", "no dumping") will be required and that 50 larger redwood signs will be required for the more prominent preserves.

Public Outreach

Public outreach is an important aspect of land management. Neighbors and visitors need to know what permitted activities are allowed, where trails are located, what resources are present, and how they can

participate in assisting in management activities. A public outreach coordinator for all of Carlsbad's open space would be ideal. This individual can coordinate the dissemination of pamphlets and mailers, nature walks and other public education activities. This cost analysis assumes that a full-time public outreach coordinator will be required (1780 hours).

E. Reporting

GIS / GPS / Database Management

A Geographic Information System (GIS) and its accompanying Global Positioning System (GPS) will be used for two principal purposes: 1) the mapping of resources (e.g. study sites, boundaries, roads, fires & fire management units, adjacent properties, acquisitions, habitats & restoration efforts, water resources, infrastructure, sensitive species' locations, human impacts, public use areas, sensitive soils' locations, wildlife movement); and 2) habitat change analyses. The data generated for the geospatial analyses required under the MHCP, along with the large data sets gathered during biological inventory and monitoring efforts will require a half-time (890 hours) GIS/Database Manager. This position will also be responsible for gathering and maintaining data sets from external sources, such as weather station data, standardizing data for transfer from field biologists to archives, and transferring data to the central CDFG archive. The materials and labor hours needed by field personnel to collect geospatial data are embedded within the biological monitoring budgets.

Equipment and software will include:

1. Latest microcomputer platform running an OS that is compatible with ArcGIS/ArcINFO.
2. Production hardware: color laser printer capable of printing on legal size paper, large format plotter, and a binder.
3. Color, high-resolution, single-pass color scanner, with software.
4. ArcGIS/ArcINFO GIS system software with accompanying extensions for 3-D analysis. High-end graphics software (e.g. Adobe Illustrator), and similar photo manipulation software (e.g. Corel PhotoPaint, Adobe PhotoShop).
5. Database software
6 Digital aerial imagery

GIS equipment costs are included in the Office Maintenance and Field Equipment sections of the PAR.

Annual Reports

Annual reports detailing all management activities and a financial summary is required under the MHCP program. Annual reports are submitted to the appropriate wildlife, other public agencies and interested parties.

Annual reporting and data analysis is built into the hourly estimates for each biological monitoring activity. However, there will be a need for someone to compile and review all the information needed for the final yearly reports. In addition, there is a need for hours to be allocated for updated management plans, annual plans and general correspondence.

A project coordinator will be required for oversight of the management of the Preserve, its employees, and to coordinate reports, meetings and other activities. This cost analysis assumes that 250 hours per year will be required for the principal manager of the preserve system for reporting and coordination.

A summary of hours required for Reporting is tabulated below:

Reporting
Summary of Personnel and Hours

Personnel	Hours per Year
GIS / GPS / Database Management Specialist	890 hrs/yr
Project Manager (Reporting and coordination)	250 hrs/yr

F. Office Maintenance

The cost to maintain a field office is included in this cost estimate and assumes an office space, computers and peripherals, and general office supplies.

G. Field Equipment

A summary of field equipment needed to perform management and monitoring requirements under the HMP and MHCP Monitoring Plan is provided in the previous sections. This information was used to compile the following tables, which detail all equipment needed to complete biological monitoring, equipment cost, and a source to justify that cost.

FIELD EQUIPMENT COST ANALYSIS

	Total Cost/Year	Cost ($)	per	Frequency (years)	Quantity	Activity	Source
Entomology							
pit cups	$15.00	0.15	each	3	300	pitfalls for ants	estimate
insect pins	$80.00	0.08	each	1	1000	curating	Forestry Suppliers, Inc
micro-dissection kit	$1.60	16.00	each	10	1	curating	Forestry Suppliers, Inc
specimen cabinet with drawers	$17.16	429.00	each	25	1	specimen storage	Forestry Suppliers, Inc
hand lens	$1.07	5.35	each	10	2	field sampling	Forestry Suppliers, Inc
alcohol	$13.75	13.75	gallon	1	1	curating	BioQuip
ethyl acetate	$8.15	8.15	quart	1	1	field sampling	BioQuip
Plastic vials	$11.50	5.75	Dozen	5	10	Field sampling	Forestry Suppliers, Inc
Sampling net	$17.00	8.50	Each	2	4	Vernal Pools	Forestry Suppliers, Inc

FIELD EQUIPMENT COST ANALYSIS (continued)

	Total Cost/Year	Cost ($)	per	Frequency (years)	Quantity	Activity	Source
Ornithology							
cowbird traps	$1,000.00	500.00	each	5	10		Varanus Bio
cowbird bait	$50.00	50.00	each	1	1		estimate
binoculars	$90.00	150.00	each	5	3		Ben Meadows
tape player	$20.00	20.00	each	5	5	species survey	estimate
Botany/Weed Control							
Skip loader rental	$1,500.00	300.00	day	1	5	fire breaks /roads/ mowing	Coyote Rentals
mower rental	$1,500.00	150.00	day	1	10	exotics removal	Coyote Rentals
chainsaw	$99.60	249.00	each	5	2	exotics removal	Forestry Suppliers, Inc
weed whip (manual)	$6.40	16.00	each	5	2	exotics removal	Ben Meadows
weed whacker (gas)	$149.40	249.00	each	5	3	exotics/ brush removal	Home Depot
assorted hand tools	$100.00	100.00	each	1	1	exotics removal	estimated
Roundup	$3,240.00	108.00	gallon	1	30	exotics removal	Home Depot
backpack sprayer	$55.00	55.00	each	3	3	exotics removal	Home Depot
plant press	$52.95	52.95	each	10	1	sampling	Forestry Suppliers, Inc
Aerial photographs	$400.00	2,000	Each	5	1	Vegetation mapping	estimate
Mammals							
Sherman trap	$725.00	14.50	each	5	250	trapping	Sherman
bait	$360.00	360.00	season	1	1	trapping	estimate
Remote cameras	$175.60	439.00	each	5	2		Forestry Suppliers, Inc.
Herpetology							
snake hook	$21.50	21.50	each	5	5	snakes	Forestry Suppliers, Inc
power auger	$75.00	600.00	each	8	1	pitfall installation	Coyote Rentals
pitfall array	$1,200	200.00	each	5	30	pitfall traps	estimated
General Biology							
flagging stakes	$250.00	10.00	bundle	1	25	field sampling	Ben Meadows
ribbon flagging	$19.50	1.30	roll	1	15	field sampling	Ben Meadows
notebooks	$200.00	10.00	each	1	20	field sampling	Ben Meadows

FIELD EQUIPMENT COST ANALYSIS (continued)

	Total Cost/Year	Cost ($)	per	Frequency (years)	Quantity	Activity	Source
GPS	$1,600.00	4,000.00	each	5	2	mapping	ASC Scientific
hand-held computer	$300.00	300.00	each	5	5	field sampling	Office Depot
50m tape	$22.77	37.95	each	5	3	field sampling	Forestry Suppliers, Inc.
100m tape	$236.85	78.95	each	5	3	field sampling	Forestry Suppliers, Inc.
tree tags	$87.00	4.35	50	1	20	perennial monitoring	Forestry Suppliers, Inc.
PVC pipe	$4	20	Total	5	1	Relevé sampling	Estimate
Water Quality							
Water meter	$155.80	779.00	each	5	1	vernal pools	Forestry Suppliers, Inc.
depth meter	$8.99	89.95	each	10	1	vernal pools	Forestry Suppliers, Inc.
TOTAL ANNUAL COST =	$13,870.59						

The total equipment cost is $34,495.7 for all supplies if purchased in the first year. The yearly cost is $13,870.59.

Field equipment also includes the cost of vehicles used for Rangers/Officers and for field biology staff. This cost estimate assumes 5 vehicles for Rangers/Officers and 4 field vehicles for all other staff. Each vehicle is a Toyota 4X4 extra-cab. It is assumed that each vehicle will travel 8,000 miles per year and that each vehicle makes 18 miles/ gallon, or a total of 444 gallons of fuel per year.

H. Operations

Contingency and Administration

As a final budget item, the Center includes a provision for contingencies at a rate of 10% of the budgeted expenses to provide a cushion for extra and unforeseen costs. There is also a provision for administrative overhead of 24% Administrative overhead costs include costs of maintaining and renting an office, office supplies, and costs of operation including legal work, financial work, insurance, endowment management, annual financial reports and tax filing. Administrative costs are considered separate from "field office" costs.

IV. Labor Rate Assumptions

The following table summarizes the labor rate assumptions used for this cost analysis. These costs usually vary from organization to organization which should be considered during discussion of this cost analysis.

Summary of Labor Rates

Position	Salary	Hourly Rate**
Science Director	$75,000	$50.73
Preserve Manager	$65,000	$44.51
Assistant Preserve Manager	$45,000	$32.08
Supervising Ranger	$50,000	$35.19
Ranger	$45,000	$32.08
Public Outreach Coordinator	$45,000	$32.08
Labor	$30,000	$22.76
Technical Support	$30,000	$22.76
GIS Specialist	$50,000	$35.19

** Includes benefits, including health care, 3% matching in a 401k, vacation (120 days), sick (96 hours) and holiday (84 hours) time that an employee of the Center is entitled to at the current time.

V. Results and Conclusions

Results

At this time there are many different organizations within the City that own land that is part of the City's natural open space. Organizations include non-profit land managers, homeowners associations (HOA), the State and the City. Some organizations are already funded and are currently conducting management activities and others have yet to participate.

The following funding analysis was determined by generating a total cost to manage the entire OSMP preserve area (7,135 acres) and then breaking down this total cost into 6 separate sub-totals based on the landowners organizational type, referred to as "General Management Entity (GME)". Examples of general management entities include non-profit, non-governmental organizations such as the Center, state agencies, such as CDFG and home owners associations. The 6 general management entities and the percent of open space they are responsible for are:

1) Biological Management Entity (20% - 1,413 acres), such as the Center;
2) The City of Carlsbad (9% - 604 acres);
3) Future Biological Management Entity (i.e. unassigned properties) (24% - 1,732 acres);
4) Other public or semi-public entities, such as Cabrillo Power (5% - 420 acres);
5) Private owners, such as Home Owners Associations (24% - 1,713 acres);
6) Wildlife agencies, such as CDFG (18% - 1,254 acres).

The total Preserve Management Cost and Cost by Category, and the Labor Hours Summary is provided in the following three tables and is based on the PAR found in Appendix 1. The total number of individuals required to manage the open space included in the City's OSMP preserve system is estimated to be approximately 12 personnel. Biological monitoring and rangers require the most time for management activities.

<u>Total OSMP Preserve Management Cost</u>

The following cost summary is based on the entire 7,135 acres in the Carlsbad OSMP preserve system taken as one unit and is based on a capitalization rate of 4.5%:

Funding Requirements	
Initial & Capital Costs	$4,172,200
Ongoing yearly costs	$1,882,398
Annual Stewardship on a per acre basis (current dollars)	$263

Total OSMP Preserve Management Cost by Category

Cost Category	Initial and Capital ($)	Ongoing ($)
Site Construction/Maintenance	811,743	102,394
Biological Surveys	435,724	319,319
Habitat Maintenance	610,575	299,806
Public Services	705,741	409,581
General Maintenance	4,000	4,000
Reporting	128,099	122,165
Office Maintenance	78,172	47,674
Field Equipment	278,176	68,551
Operations	6,564	6,564
Contingency and Administration	1,113,402	502,340
Total	**4,172,200**	**1,882,398**

Labor Hours Summary

Position	Yearly Hours*	Number of Personnel Required**
Preserve Manager	8,596	4.8
Assistant Preserve Manager	1,160	0.7
GIS Specialist	890	0.5
Science Coordinator	500	0.3
Public Outreach Coordinator	1,780	1.0
Ranger Supervisor	1,780	1.0
Rangers	7,120	4.0
Habitat Maintenance Laborers	10,680	6.0
Total:	**32,506**	**18.3**

*Termed "Ongoing" within the PAR.
**Typical hours per year for one individual is about 1,780. Does not include overhead staff.

Breakdown by General Management Entity

The following tables summarize the cost by General Management Entity. This cost is generated in several ways. For the most part, all tasks itemized in the Total Preserve Management Cost (Appendix 1) are divided by the acreage of habitat found in each General Management Entity. For example, if a GME has 20% of the coastal sage scrub found in Carlsbad, and a task is determined by the acreage of coastal sage scrub, then that GME will receive 20% of the cost. The following categories and the tasks within them (in parenthesis) are broken down by percent acreage of habitat type within each GME, or percent of total acreage within each GME:

1. Site Construction and Maintenance (all tasks)
2. Biological Surveys (tasks based on acreage which are required for all GME's).
3. Habitat Maintenance (all tasks)

4. Public Services (all tasks)
5. General Maintenance (all tasks)
6. Reporting (all tasks)
7. Office Maintenance (all tasks)
8. Field Equipment (all tasks)

If a task is not determined by acreage of habitat then the cost proportion is determined by the number of estimated hours required within a GME. All of these types of cost breakdowns occur within the Biological Survey category. An example of such a break down is Reptile Pit-array monitoring. The MHCP Monitoring and Management Plan calls for reptile Pit-arrays within certain specified regions of Carlsbad which requires that the cost is proportioned into the GME's that fall in these regions.

All endowment costs are based on a capitalization rate of 4.5%.

The entire cost breakdown (each PAR) by task for GME's 1 through 6 can be found in Appendices 2 through 7.

1. Biological Management Entity (1,413 acres)

Funding Requirements	
Initial & Capital Costs	$878,993
Ongoing yearly costs	$368,667
Annual Stewardship on a per acre basis (current dollars)	$261

Breakdown by category

Cost Category	Initial and Capital ($)	Ongoing ($)
Site Construction/Maintenance	162,348	20,478
Biological Surveys	121,605	67,472
Habitat Maintenance	120,318	1,042
Public Services	141,148	81,916
General Maintenance	800	800
Reporting	25,619	24,433
Office Maintenance	15,634	9,117
Field Equipment	55,635	13,710
Operations	1,312	1,312
Contingency and Administration	234,570	98,383
Total	**878,993**	**368,667**

Labor Hours Summary

Position	Yearly Hours*	Number of Personnel Required**
Preserve Manager	1,791	1.0
Assistant Preserve Manager	188	0.1
GIS Specialist	178	0.1
Public Outreach Coordinator	356	0.2
Ranger Supervisor	356	0.2
Rangers	1,424	0.8
Habitat Maintenance Laborers	1,851	1.0
Total:	**6,144**	**3.4**

*Termed "Ongoing" within the PAR.
**Typical hours per year for one individual is about 1,780. Does not include overhead staff.

2. City of Carlsbad (604 acres)

Funding Requirements	
Initial & Capital Costs	$396,992
Ongoing yearly costs	$180,625
Annual Stewardship on a per acre basis (current dollars)	$300

Breakdown by category

Cost Category	Initial and Capital ($)	Ongoing ($)
Site Construction/Maintenance	73,056	9,215
Biological Surveys	51,021	36,397
Habitat Maintenance	58,904	27,729
Public Services	63,516	36,862
General Maintenance	360	360
Reporting	11,528	10,994
Office Maintenance	7,035	4,102
Field Equipment	25,035	6,169
Operations	590	590
Contingency and Administration	105,942	48,201
Total	**396,992**	**180,625**

Labor Hours Summary

Position	Yearly Hours*	Number of Personnel Required**
Preserve Manager	944	0.5
Assistant Preserve Manager	229	0.1
GIS Specialist	80	0.1
Public Outreach Coordinator	160	0.05
Ranger Supervisor	160	0.05
Rangers	640	0.4
Habitat Maintenance Laborers	833	0.5
Total:	**3,048**	**1.7**

*Termed "Ongoing" within the PAR.
**Typical hours per year for one individual is about 1,780. Does not include overhead staff.

3. Future Biological Management Entity (1,732 acres)

Funding Requirements	
Initial & Capital Costs	$953,837
Ongoing yearly costs	$411,650
Annual Stewardship on a per acre basis (current dollars)	$238

Breakdown by category

Cost Category	Initial and Capital ($)	Ongoing ($)
Site Construction/Maintenance	194,818	24,575
Biological Surveys	69,757	56,265
Habitat Maintenance	146,538	63,407
Public Services	169,377	98,299
General Maintenance	960	960
Reporting	30,743	29,319
Office Maintenance	18,761	10,941
Field Equipment	66,762	16.452
Operations	1,575	1,575
Contingency and Administration	254,543	109,853
Total	**953,837**	**411,649**

Labor Hours Summary

Position	Yearly Hours*	Number of Personnel Required**
Preserve Manager	1,609	0.9
Assistant Preserve Manager	272	0.15
GIS Specialist	213	0.12
Public Outreach Coordinator	427	0.24
Ranger Supervisor	427	0.24
Rangers	1,708	1.0
Habitat Maintenance Laborers	2,221	1.3
Total:	**6,880**	**4.0**

*Termed "Ongoing" within the PAR.
**Typical hours per year for one individual is about 1,780. Does not include overhead staff.

4. Other Public or Semi-Public Organization (420 acres)

Funding Requirements	
Initial & Capital Costs	$233,607
Ongoing yearly costs	$123,618
Annual Stewardship on a per acre basis (current dollars)	$294

Breakdown by category

Cost Category	Initial and Capital ($)	Ongoing ($)
Site Construction/Maintenance	40,587	5,119
Biological Surveys	41,908	41,273
Habitat Maintenance	28,732	11,413
Public Services	35,287	20,479
General Maintenance	200	200
Reporting	6,405	6,108
Office Maintenance	3,908	2,279
Field Equipment	13,908	3,427
Operations	328	328
Contingency and Administration	62,340	32,988
Total	**233,607**	**123,617**

Labor Hours Summary

Position	Yearly Hours*	Number of Personnel Required**
Preserve Manager	999	0.56
Assistant Preserve Manager	56	0.03
GIS Specialist	44	0.03
Public Outreach Coordinator	89	0.05
Ranger Supervisor	89	0.05
Rangers	356	0.20
Habitat Maintenance Laborers	462	0.25
Total:	**2,041**	**1.2**

*Termed "Ongoing" within the PAR.

**Typical hours per year for one individual is about 1,780. Does not include overhead staff.

5. Private/HOA (1,713 acres)

Funding Requirements	
Initial & Capital Costs	$939,810
Ongoing yearly costs	$397,174
Annual Stewardship on a per acre basis (current dollars)	$232

Breakdown by category

Cost Category	Initial and Capital ($)	Ongoing ($)
Site Construction/Maintenance	194,818	24,574
Biological Surveys	59,472	45,653
Habitat Maintenance	146,538	63,407
Public Services	169,377	98,299
General Maintenance	960	960
Reporting	30,743	29,319
Office Maintenance	18,761	10,941
Field Equipment	66,762	16,452
Operations	1,575	1,575
Contingency and Administration	250,799	105,990
Total	**939,810**	**397,174**

Labor Hours Summary

Position	Yearly Hours*	Number of Personnel Required**
Preserve Manager	1,371	0.77
Assistant Preserve Manager	272	0.15
GIS Specialist	213	0.12
Public Outreach Coordinator	427	0.24
Ranger Supervisor	427	0.24
Rangers	1,708	1.0
Habitat Maintenance Laborers	2,221	1.24
Total:	**6,642**	**3.73**

*Termed "Ongoing" within the PAR.
**Typical hours per year for one individual is about 1,780. Does not include overhead staff.

6. Wildlife Agency (CDFG) (1,254 acres)

Funding Requirements	
Initial & Capital Costs	$768,960
Ongoing yearly costs	$349,247
Annual Stewardship on a per acre basis (current dollars)	$279

Breakdown by category

Cost Category	Initial and Capital ($)	Ongoing ($)
Site Construction/Maintenance	146,113	18,430
Biological Surveys	91,960	72,258
Habitat Maintenance	109,544	47,196
Public Services	127,033	73,724
General Maintenance	720	720
Reporting	23,057	21,989
Office Maintenance	14,070	8,205
Field Equipment	50,071	12,339
Operations	1,181	1,181
Contingency and Administration	205,206	93,200
Total	**768,960**	**349,246**

Labor Hours Summary

Position	Yearly Hours*	Number of Personnel Required**
Preserve Manager	1,879	1.1
Assistant Preserve Manager	197	0.11
GIS Specialist	160	0.10
Public Outreach Coordinator	320	0.18
Ranger Supervisor	320	0.18
Rangers	1,281	0.72
Habitat Maintenance Laborers	1,666	0.94
Total:	**5,825**	**3.33**

*Termed "Ongoing" within the PAR.
**Typical hours per year for one individual is about 1,780. Does not include overhead staff.

Endowments

The Center receives its funding through "non-wasting" endowments provided by the landowner at the time a preserve is created. The City of Carlsbad may choose to create an endowment to fund its reserve management in perpetuity. The following tables provide the endowment requirements for the City owned land under two scenarios: 1) if the City holds the endowment and assumes a 2.5% capitalization rate and 2) if a non-governmental organization holds the endowment and assumes a 4.5% capitalization rate.

1. Endowment required for City owned land assuming City holds endowment (2.5% capitalization rate):

Funding Requirements	
Initial & Capital Costs	$396,992
Ongoing yearly costs	$180,625
Annual Stewardship on a per acre basis (current dollars)	$300
Endowment	$7,225,000
Total	$7,621,625

2. Endowment required for City owned land assuming non-governmental organization holds endowment (4.5% capitalization rate):

Funding Requirements	
Initial & Capital Costs	$396,992
Ongoing yearly costs	$180,625
Annual Stewardship on a per acre basis (current dollars)	$300
Endowment	$4,013,889
Total	$4,410,881

Discussion

The cost analysis provided above can be compared to the costs that existing management entities are using to manage dedicated natural open space areas. The Center for Natural Lands Management owns and manages the Kelly Ranch Habitat Conservation Area and the La Costa Villages (Rancho La Costa) Habitat Conservation Area. The Center spends about $212 per acre per year at Kelly Ranch and about $70 per acre at La Costa Villages. It is common to have a higher cost per acre for smaller properties than for larger.

Comparisons with Existing Funding Sources

Management Entity	Preserve Name (acreage)	Existing Annual Expenditures per acres	Funding Analysis Estimate	Shortfall ( ) or Windfall
CNLM	Kelly Ranch (55)	$269	$263	$8
CNLM	Ranch La Costa East (622)	62	263	(201)
CNLM	Rancho La Costa West (438)	61	263	(202)
TET	Batiquitos (0.7)	161	263	(102)
TET	Bressi Ranch (185)	98	263	(65)
TET	Brodiaea Preserve (1.0)	225	263	(38)
TET	Calavera Nature Preserve (107)	239	263	(24)
TET	Calavera West Nature Preserve (137)	180	263	(83)

Comparison by Category for Rancho La Costa (CNLM)

Cost Category	CNLM Funding per acre per year	Funding Analysis per acre per year	Shortfall ( ) or Windfall
Site Construction/Maintenance	4.2	14.5	(10.3)
Biological Surveys	18.6	47,8	(29.2)
Habitat Maintenance	3.6	36.1	(32.5)
Public Services	8.1	58.0	(49.9)
General Maintenance	0.1	0.1	0
Reporting	4.5	17.3	(12.8)
Office Maintenance	1.2	6.5	(5.3)
Field Equipment	2.2	9.7	(6.5)
Contingency and Administration	20.1	69.7	(49.6)

The annual cost for La Costa Villages is about 1/4 that was estimated by this cost analysis (GME 1). This is for several reasons. First, the cost for several tasks, such as fencing, public outreach and patrolling, was based on higher numbers than what the Center received for La Costa Villages. Second, the MHCP Monitoring and Management Plan (Pan) was finalized after the Center reached a financing agreement for La Costa Villages. The Plan includes tasks, such as bird banding studies and cowbird trapping, which were not part of the Center's cost and turn out to be quite costly. Lastly, this cost analysis includes a yearly trail maintenance cost (under Public Services) that contributes considerably to the overall costs. The Center did not receive a large amount of funds for trails maintenance.

In sum, this cost analysis reflects realistic and complete cost estimate for managing land in the City of Carlsbad. The Center attempts to achieve this goal during negotiations with land developers, but many times is forced to cut back on certain items such as trail maintenance and public outreach in the end as these are important but not necessarily "required" monitoring and management items (i.e. biological monitoring of covered species is required and easily justified). If the cost of cowbird trapping and

gnatcatcher dispersal studies is removed from this cost analysis, the amount of money received for biological surveys for Rancho La Costa is very comparable with this cost analysis.

Conclusions

This document presents a cost justification and budget for the City of Carlsbad's natural open space preserve areas. The budget is intended to provide a basis for decision-making, but should be viewed as preliminary. The City should be aware that this cost analysis is based on the Center's financial model which differs from other groups in the area. Therefore, costs could be higher or lower depending on each organization's costing and financial structure. In addition, the endowment figures provided assume a 4.5% capitalization rate, which is higher than the 2.5% rate that would be required if the state or City held the endowment funds, which would result in higher endowment requirements.

The Center's analysis was constrained by use of assumed site conditions and some assumed monitoring and management guidelines. At the completion of reserve build out, the actual site conditions, division of responsibility and cost framework may differ from those envisioned by planners at the early stage in establishment of the Preserve. However, the MHCP Biological Monitoring and Management Plan, and the proposed management scenario in this document, are designed with the flexibility to meet those changes.

The time lag between this cost estimate and the actual establishment of the Reserve will influence the final management cost. Inflationary adjustments to the costs presented here will need to be included in the final contribution.

References

Habitat Management Plan for Natural Communities in the City of Carlsbad. December, 1999, with addendum.

MHCP Biological Monitoring and Management Plan. March, 2003.

Multiple Habitat Conservation Program Volume II.

VI. Appendices (PARs)

Appendix 1.

PAR for Carlsbad OSMP Preserve Management

Section 8 = Initial and Capital Funds Required
Section 9 = Ongoing Funds Required
Section 10 = Cost Summary

Section 8 - Initial & Capital Tasks and Costs

Property Title: Carlsbad Funding Analysis Dataset: CA004 PAR ID: RO61FIN 04/29/2004

Budget: PAR

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
SITE CONSTRUCTION/MAINT.							
Fence, 4' X 6' X 6'	Post & 3/4" Cable	Lin. Ft.	24,288.00	12.00	291,456.00	1.0	291,456.00
Fence - Installed	Chain Link 6'	Lin. Ft.	12,144.00	9.85	119,618.40	1.0	119,618.40
Fence - Installed	Barbed-wire, 4 strd.	Lin. Ft.	72,864.00	2.45	178,516.80	1.0	178,516.80
Gate	16" arm swing	Item	50.00	2,500.00	125,000.00	1.0	125,000.00
Vehicle Barrier	Concrete Bollard	Lin. Ft	12,144.00	8.00	97,152.00	1.0	97,152.00
Sub-Total							811,743.20
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	300.00	44.51	13,353.00	1.0	13,353.00
Plant Ecologist	Vegetation Mapping	L. Hours	357.00	44.51	15,890.07	1.0	15,890.07
Plant Ecologist	Vernal Pool Measure variables	L. Hours	144.00	44.51	6,409.44	1.0	6,409.44
Plant Ecologist	Sensitive Plant Species Survey	L. Hours	345.00	44.51	15,355.95	1.0	15,355.95
Plant Ecologist	Monit. Enc Bacc & DM	L. Hours	40.00	44.51	1,780.40	1.0	1,780.40
Plant Ecologist	Spec:management &	L. Hours	300.00	44.51	13,353.00	1.0	13,353.00
Entomologist	Fairy Shrimp surveys	L. Hours	75.00	44.51	3,338.25	1.0	3,338.25
Entomologist	Skipper surveys	L. Hours	140.00	44.51	6,231.40	1.0	6,231.40
Entomologist	Ant surveys	L. Hours	200.00	44.51	8,902.00	1.0	8,902.00
Herpetologist	Vernal Pool/Spadefoot monitor	L. Hours	60.00	44.51	2,670.60	1.0	2,670.60
Herpetologist	Pit-array monitoring	L. Hours	480.00	44.51	21,364.80	1.0	21,364.80
Herpetologist	Pit-array installation/maint	L. Hours	120.00	32.08	3,849.60	1.0	3,849.60
Mammalogist	Wildlife Corridors	L. Hours	640.00	44.51	28,486.40	1.0	28,486.40
Ornithologist	CSS, Chap, and grassland	L. Hours	1,328.00	44.51	59,109.28	1.0	59,109.28
Ornithologist	Riparian	L. Hours	240.00	44.51	10,682.40	1.0	10,682.40
Ornithologist	LBV,WIFL nest monitoring	L. Hours	192.00	44.51	8,545.92	1.0	8,545.92
Ornithologist	Lagoons	L. Hours	1,168.00	44.51	51,987.68	1.0	51,987.68
Ornithologist	CAGN dispersal studies	L. Hours	2,400.00	44.51	106,824.00	1.0	106,824.00
Science Director	Planning and Review	L. Hours	500.00	50.73	25,365.00	1.0	25,365.00
Monitor Climate	Analyze data	L. Hours	50.00	44.51	2,225.50	1.0	2,225.50
Other	Adaptive management	Item	1.00	30,000.00	30,000.00	1.0	30,000.00
Sub-Total							435,724.69
HABITAT MAINTENANCE							
Erosion Control	Labor	L. Hours	1,780.00	22.76	40,512.80	1.0	40,512.80
Seed Collection	Seed Banking	Accession	4.00	2,500.00	10,000.00	1.0	10,000.00
Plant Procurement	Plant nursery prop. $4/plant	Item	1,000.00	4.00	4,000.00	1.0	4,000.00
Exotic Plant Control	Supervision by botantist	L. Hours	300.00	44.51	13,353.00	1.0	13,353.00
Exotic Plant Control	Up-front control	Item	1.00	500,000.00	500,000.00	1.0	500,000.00
Exotic Animal Control	Supervise cowbird removal	L. Hours	40.00	44.51	1,780.40	1.0	1,780.40
Exotic Animal Control	Cowbird trap checks-labor	L. Hours	1,120.00	32.08	35,929.60	1.0	35,929.60
Exotic Animal Control	Cowbird Traps	Item	10.00	500.00	5,000.00	1.0	5,000.00
Sub-Total							610,575.80

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
PUBLIC SERVICES							
Patrolling	Supervising officer	L. Hours	1,780.00	35.19	62,638.20	1.0	62,638.20
Patrolling	4 rangers/ officers	L. Hours	7,120.00	32.08	228,409.60	1.0	228,409.60
Trail	Maintenance	Mile	68.00	4,000.00	272,000.00	1.0	272,000.00
Sign	Misc	Item	1,000.00	3.25	3,250.00	1.0	3,250.00
Sign	Boundary 8" X 13.5"	Item	4,065.00	5.25	21,341.25	1.0	21,341.25
Sign	Sign posts u-channel	Item	1,000.00	11.00	11,000.00	1.0	11,000.00
Sign, Redwood	Interpretive 4'X 6'	Item	50.00	1,000.00	50,000.00	1.0	50,000.00
Community Outreach	Public outreach coordinator	L. Hours	1,780.00	32.08	57,102.40	1.0	57,102.40
Sub-Total							705,741.45
GENERAL MAINTENANCE							
Hauling, Truck	Truckload of trash	Item	100.00	40.00	4,000.00	1.0	4,000.00
Sub-Total							4,000.00
REPORTING							
Database Management	Data analysis and reporting	L. Hours	1,538.00	44.51	68,456.38	1.0	68,456.38
GIS/CAD Management	Data Management	L. Hours	890.00	44.51	39,613.90	1.0	39,613.90
Annual Reports	Reporting coordination	L. Hours	250.00	44.51	11,127.50	1.0	11,127.50
Management Plan	Initial Report	L. Hours	200.00	44.51	8,902.00	1.0	8,902.00
Sub-Total							128,099.78
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	500.00	44.51	22,255.00	1.0	22,255.00
Preserve Office	Office rent	Sq. Ft.	2,000.00	1.70	3,400.00	1.0	3,400.00
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	2,000.00	1.00	2,000.00	1.0	2,000.00
Telephone Charges, Annual	Cell Phone Charges 8 phones	Year	12.00	720.00	8,640.00	1.0	8,640.00
Office Supplies, Year	Supplies	Person	10.00	250.00	2,500.00	1.0	2,500.00
Furniture	Desk	Item	10.00	250.00	2,500.00	1.0	2,500.00
Furniture	Chair	Item	10.00	150.00	1,500.00	1.0	1,500.00
Furniture	Bookcase, 3'x5'	Item	2.00	150.00	300.00	1.0	300.00
Furniture	File cabinet	Item	5.00	400.00	2,000.00	1.0	2,000.00
Copier	Copier, 15-18 ppm	Item	1.00	2,500.00	2,500.00	1.0	2,500.00
Fax Machine	Standard	Item	1.00	250.00	250.00	1.0	250.00
Telephone	Touch-tone	Item	10.00	55.00	550.00	1.0	550.00
E-Mail	Services	Year	1.00	500.00	500.00	1.0	500.00
Computer, PC & Monitor	Computers	Item	10.00	2,100.00	21,000.00	1.0	21,000.00
Computer software	Microsoft Office Pkg	Item	8.00	450.00	3,600.00	1.0	3,600.00
Computer software	ArcGIS	Item	1.00	1,500.00	1,500.00	1.0	1,500.00
Laser Printer	600 DPI	Item	2.00	840.00	1,680.00	1.0	1,680.00
Deskjet Printer	Color printer	Item	3.00	499.00	1,497.00	1.0	1,497.00
Sub-Total							78,172.00

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
FIELD EQUIPMENT							
Vehicle	Toyota extra-cab 4X4	Item	9.00	24,000.00	216,000.00	1.0	216,000.00
Vehicle	Fuel (444 gallons/vehicle/year	Gallons	3,996.00	2.00	7,992.00	1.0	7,992.00
Vehicle	Maintenance	Year	1.00	5,000.00	5,000.00	1.0	5,000.00
Vehicle Insurance	Insurance (9 x $1,632/yr))	Year	1.00	14,688.80	14,688.80	1.0	14,688.80
Other	all supplies 1st yr, see text	Item	1.00	34,495.70	34,495.70	1.0	34,495.70
Sub-Total							278,176.50
OPERATIONS							
Audit	CPA Audit	Acre	7,135.00	0.55	3,924.25	1.0	3,924.25
Insurance	Liability/Fee	Acres	7,135.00	0.37	2,639.95	1.0	2,639.95
Sub-Total							6,564.20
CONTINGENCY & ADMINISTRATION							
Contingency							305,879.76
Administration							807,522.57
Sub-Total							1,113,402.33
Total							4,172,199.95

Section 9 - Ongoing Tasks and Costs

Property Title: Carlsbad Funding Analysis Dataset: CA004 PAR ID: RO61FIN 04/29/2004

Budget: PAR

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
SITE CONSTRUCTION/MAINT.							
Fence, 4' X 6' X 6'	Post & 3/4" Cable	Lin. Ft.	24,288.00	12.00	291,456.00	25	11,658.24
Fence, 4' X 6' X 6'	Post & 3/4" Cable Maintenance	Lin. Ft.	2,428.80	12.00	29,145.60	1	29,145.60
Fence - Installed	Chain Link 6'	Lin. Ft.	12,144.00	9.85	119,618.40	25	4,784.74
Fence - Installed	Chain Link 6' Mainenance	Lin. Ft.	1,214.40	9.85	11,961.84	1	11,961.84
Fence - Installed	Barbed-wire, 4 strd.	Lin. Ft.	72,864.00	2.45	178,516.80	25	7,140.67
Fence - Installed	Barbed-wire, 4 strd.Maintain	Lin. Ft.	7,286.40	2.45	17,851.68	1	17,851.68
Gate	16" arm swing	Item	50.00	2,500.00	125,000.00	20	6,250.00
Vehicle Barrier	Concrete Bollard	Lin. Ft	12,144.00	8.00	97,152.00	25	3,886.08
Vehicle Barrier	Concrete Bollard maintain	Lin. Ft	1,214.40	8.00	9,715.20	1	9,715.20
Sub-Total							102,394.05
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	300.00	44.51	13,353.00	1	13,353.00
Plant Ecologist	Vegetation Mapping	L. Hours	357.00	44.51	15,890.07	5	3,178.01
Plant Ecologist	Vernal Pool Measure variables	L. Hours	144.00	44.51	6,409.44	1	6,409.44
Plant Ecologist	Sensitive Plant Species Survey	L. Hours	345.00	44.51	15,355.95	1	15,355.95
Plant Ecologist	Monit. Enc Bacc & DM	L. Hours	40.00	44.51	1,780.40	5	356.08
Plant Ecologist	Spec:management &	L. Hours	300.00	44.51	13,353.00	1	13,353.00
Entomologist	Fairy Shrimp surveys	L. Hours	75.00	44.51	3,338.25	1	3,338.25
Entomologist	Skipper surveys	L. Hours	140.00	44.51	6,231.40	1	6,231.40
Entomologist	Ant surveys	L. Hours	200.00	44.51	8,902.00	1	8,902.00
Herpetologist	Vernal Pool/Spadefoot monitor	L. Hours	60.00	44.51	2,670.60	1	2,670.60
Herpetologist	Pit-array monitoring	L. Hours	480.00	44.51	21,364.80	2	10,682.40
Herpetologist	Pit-array installation/maint	L. Hours	120.00	32.08	3,849.60	3	1,283.20
Mammalogist	Wildlife Corridors	L. Hours	640.00	44.51	28,486.40	1	28,486.40
Ornithologist	CSS, Chap, and grassland	L. Hours	1,328.00	44.51	59,109.28	1	59,109.28
Ornithologist	Riparian	L. Hours	240.00	44.51	10,682.40	1	10,682.40
Ornithologist	LBV,WIFL nest monitoring	L. Hours	192.00	44.51	8,545.92	1	8,545.92
Ornithologist	Lagoons	L. Hours	1,168.00	44.51	51,987.68	1	51,987.68
Ornithologist	CAGN dispersal studies	L. Hours	2,400.00	44.51	106,824.00	6	17,804.00
Science Director	Planning and Review	L. Hours	500.00	50.73	25,365.00	1	25,365.00
Monitor Climate	Analyze data	L. Hours	50.00	44.51	2,225.50	1	2,225.50
Other	Adaptive management	Item	1.00	30,000.00	30,000.00	1	30,000.00
Sub-Total							319,319.51

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
HABITAT MAINTENANCE							
Erosion Control	Labor	L. Hours	1,780.00	22.76	40,512.80	1	40,512.80
Seed Collection	Seed Banking	Accession	4.00	2,500.00	10,000.00	15	666.67
Plant Procurement	Plant nursery prop. $4/plant	Item	1,000.00	4.00	4,000.00	1	4,000.00
Exotic Plant Control	Supervision by botantist	L. Hours	300.00	44.51	13,353.00	1	13,353.00
Exotic Plant Control	Laborers (5)	L. Hours	8,900.00	22.76	202,564.00	1	202,564.00
Exotic Animal Control	Supervise cowbird removal	L. Hours	40.00	44.51	1,780.40	1	1,780.40
Exotic Animal Control	Cowbird trap checks-labor	L. Hours	1,120.00	32.08	35,929.60	1	35,929.60
Exotic Animal Control	Cowbird Traps	Item	10.00	500.00	5,000.00	5	1,000.00
Sub-Total							299,806.47
PUBLIC SERVICES							
Patrolling	Supervising officer	L. Hours	1,780.00	35.19	62,638.20	1	62,638.20
Patrolling	4 rangers/ officers	L. Hours	7,120.00	32.08	228,409.60	1	228,409.60
Trail	Maintenance	Mile	68.00	4,000.00	272,000.00	5	54,400.00
Sign	Misc	Item	1,000.00	3.25	3,250.00	7	464.29
Sign	Boundary 8" X 13.5"	Item	4,065.00	5.25	21,341.25	10	2,134.13
Sign	Sign posts u-channel	Item	1,000.00	11.00	11,000.00	10	1,100.00
Sign, Redwood	Interpretive 4'X 6'	Item	50.00	1,000.00	50,000.00	15	3,333.33
Community Outreach	Public outreach coordinator	L. Hours	1,780.00	32.08	57,102.40	1	57,102.40
Sub-Total							409,581.95
GENERAL MAINTENANCE							
Hauling, Truck	Truckload of trash	Item	100.00	40.00	4,000.00	1	4,000.00
Sub-Total							4,000.00
REPORTING							
Database Management	Data analysis and reporting	L. Hours	1,538.00	44.51	68,456.38	1	68,456.38
GIS/CAD Management	Data Management	L. Hours	890.00	44.51	39,613.90	1	39,613.90
Annual Reports	Reporting coordination	L. Hours	250.00	44.51	11,127.50	1	11,127.50
Management Plan	Initial Report	L. Hours	200.00	44.51	8,902.00	3	2,967.33
Sub-Total							122,165.11
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	500.00	44.51	22,255.00	1	22,255.00
Preserve Office	Office rent	Sq. Ft.	2,000.00	1.70	3,400.00	1	3,400.00
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	2,000.00	1.00	2,000.00	1	2,000.00
Telephone Charges, Annual	Cell Phone Charges 8 phones	Year	12.00	720.00	8,640.00	1	8,640.00
Office Supplies, Year	Supplies	Person	10.00	250.00	2,500.00	1	2,500.00
Furniture	Desk	Item	10.00	250.00	2,500.00	10	250.00
Furniture	Chair	Item	10.00	150.00	1,500.00	5	300.00
Furniture	Bookcase, 3'x5'	Item	2.00	150.00	300.00	8	37.50
Furniture	File cabinet	Item	5.00	400.00	2,000.00	10	200.00
Copier	Copier, 15-18 ppm	Item	1.00	2,500.00	2,500.00	8	312.50
Fax Machine	Standard	Item	1.00	250.00	250.00	5	50.00
Telephone	Touch-tone	Item	10.00	55.00	550.00	5	110.00
E-Mail	Services	Year	1.00	500.00	500.00	1	500.00

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
Computer, PC & Monitor	Computers	Item	10.00	2,100.00	21,000.00	4	5,250.00
Computer software	Microsoft Office Pkg	Item	8.00	450.00	3,600.00	4	900.00
Computer software	ArcGIS	Item	1.00	1,500.00	1,500.00	5	300.00
Laser Printer	600 DPI	Item	2.00	840.00	1,680.00	4	420.00
Deskjet Printer	Color printer	Item	3.00	499.00	1,497.00	6	249.50
Sub-Total							47,674.50
FIELD EQUIPMENT							
Vehicle	Toyota extra-cab 4X4	Item	9.00	24,000.00	216,000.00	8	27,000.00
Vehicle	Fuel (444 gallons/vehicle/year	Gallons	3,996.00	2.00	7,992.00	1	7,992.00
Vehicle	Maintenance	Year	1.00	5,000.00	5,000.00	1	5,000.00
Vehicle Insurance	Insurance (9 x $1,632/yr))	Year	1.00	14,688.80	14,688.80	1	14,688.80
Other	all supplies, see text	Item	1.00	13,870.59	13,870.59	1	13,870.59
Sub-Total							68,551.39
OPERATIONS							
Audit	CPA Audit	Acre	7,135.00	0.55	3,924.25	1	3,924.25
Insurance	Liability/Fee	Acres	7,135.00	0.37	2,639.95	1	2,639.95
Sub-Total							6,564.20
CONTINGENCY & ADMINISTRATION							
Contingency							138,005.72
Administration							364,335.10
Sub-Total							502,340.82
Total							1,882,398.00

Section 10 - Financial Summary

Property Title: Carlsbad Funding Analysis Dataset: CA004 PAR ID: RO61FIN 04/29/2004

PAR(70 ac.)

	Rate %	Total $
INITIAL FINANCIAL REQUIREMENTS		
I & C Revenue		0
I & C Management Costs		3,058,797
I & C Contingency Expense	10.00	305,880
Total I & C Management Costs		3,364,677
I & C Administrative Costs of Total I & C Management Costs	24.00	807,523
Total I & C Costs		4,172,200
Net I & C Management and Administrative Costs		4,172,200
ANNUAL ONGOING FINANCIAL REQUIREMENTS		
Ongoing Costs		1,380,057
Ongoing Contingency Expense	10.00	138,006
Total Ongoing Management Costs		1,518,063
Ongoing Administrative Costs of Total Ongoing Management costs	24.00	364,335
Total Ongoing Costs		1,882,398
ENDOWMENT REQUIREMENTS FOR ONGOING STEWARDSHIP		
Endowment to Provide Income of $1,882,398		41,831,067
Endowment per Acre is $5,862.		
Ongoing Management Costs Based on 4.50% of Endowment per Year.		
Ongoing Management Funding is $1,882,398 per Year Resulting in $263 per Acre per Year.		
TOTAL CONTRIBUTION		46,003,267

Appendix 2.

PAR for Biological Management Entities

Section 8 = Initial and Capital Funds Required
Section 9 = Ongoing Funds Required
Section 10 = Cost Summary

Section 8 - Initial & Capital Tasks and Costs

Property Title: Carlsbad Funding Analysis Dataset: CA004 PAR ID: RO61FIN 04/29/2004

Budget: Phase Budget 001 Biological

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
SITE CONSTRUCTION/MAINT.							
Fence, 4' X 6' X 6'	Post & 3/4" Cable	Lin. Ft.	4,857.60	12.00	58,291.20	1.0	58,291.20
Fence - Installed	Chain Link 6'	Lin. Ft.	2,428.80	9.85	23,923.68	1.0	23,923.68
Fence - Installed	Barbed-wire, 4 strd.	Lin. Ft.	14,572.80	2.45	35,703.36	1.0	35,703.36
Gate	16" arm swing	Item	10.00	2,500.00	25,000.00	1.0	25,000.00
Vehicle Barrier	Concrete Bollard	Lin. Ft	2,428.80	8.00	19,430.40	1.0	19,430.40
Sub-Total							162,348.64
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	50.00	44.51	2,225.50	1.0	2,225.50
Plant Ecologist	Vegetation Mapping	L. Hours	71.40	44.51	3,178.01	1.0	3,178.01
Plant Ecologist	Sensitive Plant Species Survey	L. Hours	54.66	44.51	2,433.02	1.0	2,433.02
Plant Ecologist	Monit. Enc Bacc & DM	L. Hours	12.80	44.51	569.73	1.0	569.73
Plant Ecologist	Spec:management &	L. Hours	50.00	44.51	2,225.50	1.0	2,225.50
Entomologist	Skipper surveys	L. Hours	9.00	44.51	400.59	1.0	400.59
Entomologist	Ant surveys	L. Hours	40.00	44.51	1,780.40	1.0	1,780.40
Herpetologist	Pit-array monitoring	L. Hours	240.00	44.51	10,682.40	1.0	10,682.40
Herpetologist	Pit-array installation/maint	L. Hours	60.00	32.08	1,924.80	1.0	1,924.80
Mammalogist	Wildlife Corridors	L. Hours	160.00	44.51	7,121.60	1.0	7,121.60
Ornithologist	CSS, Chap, and grassland	L. Hours	479.07	44.51	21,323.41	1.0	21,323.41
Ornithologist	Riparian	L. Hours	36.00	44.51	1,602.36	1.0	1,602.36
Ornithologist	LBV,WIFL nest monitoring	L. Hours	28.80	44.51	1,281.89	1.0	1,281.89
Ornithologist	CAGN dispersal studies	L. Hours	1,200.00	44.51	53,412.00	1.0	53,412.00
Science Director	Planning and Review	Hours	100.00	50.73	5,073.00	1.0	5,073.00
Monitor Climate	Analyze data	L. Hours	8.33	44.51	370.92	1.0	370.92
Other	Adaptive management	Item	0.20	30,000.00	6,000.00	1.0	6,000.00
Sub-Total							121,605.13
HABITAT MAINTENANCE							
Erosion Control	Slope Stabilization	L. Hours	356.00	22.76	8,102.56	1.0	8,102.56
Seed Collection	Seed Banking	Accession	0.80	2,500.00	2,000.00	1.0	2,000.00
Plant Procurement	Rooted cuttings	Item	200.00	4.00	800.00	1.0	800.00
Exotic Plant Control	Supervision by botantist	L. Hours	60.00	44.51	2,670.60	1.0	2,670.60
Exotic Plant Control	Up-front control	Item	0.20	500,000.00	100,000.00	1.0	100,000.00
Exotic Animal Control	Supervise cowbird removal	L. Hours	8.00	44.51	356.08	1.0	356.08
Exotic Animal Control	Cowbird trap checks-labor	L. Hours	168.00	32.08	5,389.44	1.0	5,389.44
Exotic Animal Control	Cowbird Traps	Item	2.00	500.00	1,000.00	1.0	1,000.00
Sub-Total							120,318.68

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
PUBLIC SERVICES							
Patrolling	Supervising officer	L. Hours	356.00	35.19	12,527.64	1.0	12,527.64
Patrolling	4 rangers/ officers	L. Hours	1,424.00	32.08	45,681.92	1.0	45,681.92
Trail	Maintenance	Mile	13.60	4,000.00	54,400.00	1.0	54,400.00
Sign	Misc	Item	200.00	3.25	650.00	1.0	650.00
Sign	Boundary 8" X 13.5"	Item	813.00	5.25	4,268.25	1.0	4,268.25
Sign	Sign posts u-channel	Item	200.00	11.00	2,200.00	1.0	2,200.00
Sign, Redwood	Interpretive 4'X 6'	Item	10.00	1,000.00	10,000.00	1.0	10,000.00
Community Outreach	Public outreach coordinator	L. Hours	356.00	32.08	11,420.48	1.0	11,420.48
Sub-Total							141,148.29
GENERAL MAINTENANCE							
Hauling, Truck	Truckload of trash	Item	20.00	40.00	800.00	1.0	800.00
Sub-Total							800.00
REPORTING							
Database Management	Data analysis and reporting	L. Hours	307.60	44.51	13,691.28	1.0	13,691.28
GIS/CAD Management	Data Management	L. Hours	178.00	44.51	7,922.78	1.0	7,922.78
Annual Reports	Reporting coordination	L. Hours	50.00	44.51	2,225.50	1.0	2,225.50
Management Plan	Initial Report	L. Hours	40.00	44.51	1,780.40	1.0	1,780.40
Sub-Total							25,619.96
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	100.00	44.51	4,451.00	1.0	4,451.00
Preserve Office	Janitorial	Sq. Ft.	400.00	1.70	680.00	1.0	680.00
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	400.00	1.00	400.00	1.0	400.00
Telephone Charges, Annual	Cell Phone Charges 8 phones	Year	2.40	720.00	1,728.00	1.0	1,728.00
Office Supplies, Year	Supplies	Person	2.00	250.00	500.00	1.0	500.00
Furniture	Desk	Item	2.00	250.00	500.00	1.0	500.00
Furniture	Chair	Item	2.00	150.00	300.00	1.0	300.00
Furniture	Bookcase, 3'x5'	Item	0.40	150.00	60.00	1.0	60.00
Furniture	File cabinet	Item	1.00	400.00	400.00	1.0	400.00
Copier	Copier, 15-18 ppm	Item	0.20	2,500.00	500.00	1.0	500.00
Fax Machine	Standard	Item	0.20	250.00	50.00	1.0	50.00
Telephone	Touch-tone	Item	2.00	55.00	110.00	1.0	110.00
E-Mail	Services	Year	0.20	500.00	100.00	1.0	100.00
Computer, PC & Monitor	133 MHz Pentium	Item	2.00	2,100.00	4,200.00	1.0	4,200.00
Computer software	Microsoft Office Pkg	Item	1.60	450.00	720.00	1.0	720.00
Computer software	Consulting	Hour	0.20	1,500.00	300.00	1.0	300.00
Laser Printer	600 DPI	Item	0.40	840.00	336.00	1.0	336.00
Deskjet Printer	HP DeskJet 895	Item	0.60	499.00	299.40	1.0	299.40
Sub-Total							15,634.40

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
FIELD EQUIPMENT							
Vehicle	Toyota extra-cab 4X4	Item	1.80	24,000.00	43,200.00	1.0	43,200.00
Vehicle	Fuel (444 gallons/vehicle/year	Gallons	799.20	2.00	1,598.40	1.0	1,598.40
Vehicle	Maintenance	Year	0.20	5,000.00	1,000.00	1.0	1,000.00
Vehicle Insurance	Insurance (9 x $1,632/yr))	Year	0.20	14,688.80	2,937.76	1.0	2,937.76
Other	all supplies 1st yr, see text	Item	0.20	34,495.70	6,899.14	1.0	6,899.14
Sub-Total							55,635.30
OPERATIONS							
Audit	CPA Audit	Acre	1,427.00	0.55	784.85	1.0	784.85
Insurance	Liability/Fee	Acres	1,427.00	0.37	527.99	1.0	527.99
Sub-Total							1,312.84
CONTINGENCY & ADMINISTRATION							
Contingency							64,442.32
Administration							170,127.74
Sub-Total							234,570.06
Total							878,993.30

Section 9 - Ongoing Tasks and Costs

Property Title: Carlsbad Funding Analysis Dataset: CA004 PAR ID: RO61FIN 04/29/2004

Budget: Phase Budget 001 Biological

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
SITE CONSTRUCTION/MAINT.							
Fence, 4' X 6' X 6'	Post & 3/4" Cable	Lin. Ft.	4,857.60	12.00	58,291.20	25	2,331.65
Fence, 4' X 6' X 6'	Post & 3/4" Cable Maintenance	Lin. Ft.	485.76	12.00	5,829.12	1	5,829.12
Fence - Installed	Chain Link 6'	Lin. Ft.	2,428.80	9.85	23,923.68	25	956.95
Fence - Installed	Chain Link 6' Mainenance	Lin. Ft.	242.88	9.85	2,392.37	1	2,392.37
Fence - Installed	Barbed-wire, 4 strd.	Lin. Ft.	14,572.80	2.45	35,703.36	25	1,428.13
Fence - Installed	Barbed-wire, 4 strd.Maintain	Lin. Ft.	1,457.28	2.45	3,570.34	1	3,570.34
Gate	16" arm swing	Item	10.00	2,500.00	25,000.00	20	1,250.00
Vehicle Barrier	Concrete Bollard	Lin. Ft	2,428.80	8.00	19,430.40	25	777.22
Vehicle Barrier	Concrete Bollard maintain	Lin. Ft	242.88	8.00	1,943.04	1	1,943.04
Sub-Total							20,478.82
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	50.00	44.51	2,225.50	1	2,225.50
Plant Ecologist	Vegetation Mapping	L. Hours	71.40	44.51	3,178.01	5	635.60
Plant Ecologist	Sensitive Plant Species Survey	L. Hours	54.66	44.51	2,433.02	1	2,433.02
Plant Ecologist	Monit. Enc Bacc & DM	L. Hours	12.80	44.51	569.73	5	113.95
Plant Ecologist	Spec:management &	L. Hours	50.00	44.51	2,225.50	1	2,225.50
Entomologist	Skipper surveys	L. Hours	9.00	44.51	400.59	1	400.59
Entomologist	Ant surveys	L. Hours	40.00	44.51	1,780.40	1	1,780.40
Herpetologist	Pit-array monitoring	L. Hours	240.00	44.51	10,682.40	2	5,341.20
Herpetologist	Pit-array installation/maint	L. Hours	60.00	32.08	1,924.80	3	641.60
Mammalogist	Wildlife Corridors	L. Hours	160.00	44.51	7,121.60	1	7,121.60
Ornithologist	CSS, Chap, and grassland	L. Hours	479.07	44.51	21,323.41	1	21,323.41
Ornithologist	Riparian	L. Hours	36.00	44.51	1,602.36	1	1,602.36
Ornithologist	LBV,WIFL nest monitoring	L. Hours	28.80	44.51	1,281.89	1	1,281.89
Ornithologist	CAGN dispersal studies	L. Hours	1,200.00	44.51	53,412.00	6	8,902.00
Science Director	Planning and Review	Hours	100.00	50.73	5,073.00	1	5,073.00
Monitor Climate	Analyze data	L. Hours	8.33	44.51	370.92	1	370.92
Other	Adaptive management	Item	0.20	30,000.00	6,000.00	1	6,000.00
Sub-Total							67,472.54
HABITAT MAINTENANCE							
Erosion Control	Slope Stabilization	L. Hours	356.00	22.76	8,102.56	5	1,620.51
Seed Collection	Seed Banking	Accession	0.80	2,500.00	2,000.00	15	133.33
Plant Procurement	Rooted cuttings	Item	200.00	4.00	800.00	5	160.00
Exotic Plant Control	Supervision by botantist	L. Hours	60.00	44.51	2,670.60	1	2,670.60
Exotic Plant Control	Laborers (5)	L. Hours	1,780.00	22.76	40,512.80	1	40,512.80
Exotic Animal Control	Supervise cowbird removal	L. Hours	8.00	44.51	356.08	1	356.08
Exotic Animal Control	Cowbird trap checks-labor	L. Hours	168.00	32.08	5,389.44	1	5,389.44
Exotic Animal Control	Cowbird Traps	Item	2.00	500.00	1,000.00	5	200.00
Sub-Total							51,042.76

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
PUBLIC SERVICES							
Patrolling	Supervising officer	L. Hours	356.00	35.19	12,527.64	1	12,527.64
Patrolling	4 rangers/ officers	L. Hours	1,424.00	32.08	45,681.92	1	45,681.92
Trail	Maintenance	Mile	13.60	4,000.00	54,400.00	5	10,880.00
Sign	Misc	Item	200.00	3.25	650.00	7	92.86
Sign	Boundary 8" X 13.5"	Item	813.00	5.25	4,268.25	10	426.83
Sign	Sign posts u-channel	Item	200.00	11.00	2,200.00	10	220.00
Sign, Redwood	Interpretive 4'X 6'	Item	10.00	1,000.00	10,000.00	15	666.67
Community Outreach	Public outreach coordinator	L. Hours	356.00	32.08	11,420.48	1	11,420.48
Sub-Total							81,916.40
GENERAL MAINTENANCE							
Hauling, Truck	Truckload of trash	Item	20.00	40.00	800.00	1	800.00
Sub-Total							800.00
REPORTING							
Database Management	Data analysis and reporting	L. Hours	307.60	44.51	13,691.28	1	13,691.28
GIS/CAD Management	Data Management	L. Hours	178.00	44.51	7,922.78	1	7,922.78
Annual Reports	Reporting coordination	L. Hours	50.00	44.51	2,225.50	1	2,225.50
Management Plan	Initial Report	L. Hours	40.00	44.51	1,780.40	3	593.47
Sub-Total							24,433.03
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	100.00	44.51	4,451.00	1	4,451.00
Preserve Office	Janitorial	Sq. Ft.	400.00	1.70	680.00	30	22.67
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	400.00	1.00	400.00	1	400.00
Telephone Charges, Annual	Cell Phone Charges 8 phones	Year	2.40	720.00	1,728.00	1	1,728.00
Office Supplies, Year	Supplies	Person	2.00	250.00	500.00	1	500.00
Furniture	Desk	Item	2.00	250.00	500.00	10	50.00
Furniture	Chair	Item	2.00	150.00	300.00	5	60.00
Furniture	Bookcase, 3'x5'	Item	0.40	150.00	60.00	8	7.50
Furniture	File cabinet	Item	1.00	400.00	400.00	10	40.00
Copier	Copier, 15-18 ppm	Item	0.20	2,500.00	500.00	8	62.50
Fax Machine	Standard	Item	0.20	250.00	50.00	5	10.00
Telephone	Touch-tone	Item	2.00	55.00	110.00	5	22.00
E-Mail	Services	Year	0.20	500.00	100.00	1	100.00
Computer, PC & Monitor	133 MHz Pentium	Item	2.00	2,100.00	4,200.00	4	1,050.00
Computer software	Microsoft Office Pkg	Item	1.60	450.00	720.00	4	180.00
Computer software	Consulting	Hour	0.20	1,500.00	300.00	1	300.00
Laser Printer	600 DPI	Item	0.40	840.00	336.00	4	84.00
Deskjet Printer	HP DeskJet 895	Item	0.60	499.00	299.40	6	49.90
Sub-Total							9,117.57

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
FIELD EQUIPMENT							
Vehicle	Toyota extra-cab 4X4	Item	1.80	24,000.00	43,200.00	8	5,400.00
Vehicle	Fuel (444 gallons/vehicle/year	Gallons	799.20	2.00	1,598.40	1	1,598.40
Vehicle	Maintenance	Year	0.20	5,000.00	1,000.00	1	1,000.00
Vehicle Insurance	Insurance (9 x $1,632/yr))	Year	0.20	14,688.80	2,937.76	1	2,937.76
Other	all supplies, see text	Item	0.20	13,870.59	2,774.12	1	2,774.12
Sub-Total							13,710.28
OPERATIONS							
Audit	CPA Audit	Acre	1,427.00	0.55	784.85	1	784.85
Insurance	Liability/Fee	Acres	1,427.00	0.37	527.99	1	527.99
Sub-Total							1,312.84
CONTINGENCY & ADMINISTRATION							
Contingency							27,028.42
Administration							71,355.04
Sub-Total							98,383.46
Total							368,667.70

Phase Budget 001 Biological Management Entity (1412 ac.)

	Rate %	Total $
INITIAL FINANCIAL REQUIREMENTS		
I & C Revenue		0
I & C Management Costs		644,423
I & C Contingency Expense	10.00	64,442
Total I & C Management Costs		708,865
I & C Administrative Costs of Total I & C Management Costs	24.00	170,128
Total I & C Costs		878,993
Net I & C Management and Administrative Costs		878,993
ANNUAL ONGOING FINANCIAL REQUIREMENTS		
Ongoing Costs		270,284
Ongoing Contingency Expense	10.00	27,028
Total Ongoing Management Costs		297,312
Ongoing Administrative Costs of Total Ongoing Management costs	24.00	71,355
Total Ongoing Costs		368,667
ENDOWMENT REQUIREMENTS FOR ONGOING STEWARDSHIP		
Endowment to Provide Income of $368,667		8,192,600
Endowment per Acre is $5,802.		
Ongoing Management Costs Based on 4.50% of Endowment per Year.		
Ongoing Management Funding is $368,667 per Year Resulting in $261 per Acre per Year.		
TOTAL CONTRIBUTION		9,071,593

Appendix 3.

PAR for City of Carlsbad Properties

Section 8 = Initial and Capital Funds Required
Section 9 = Ongoing Funds Required
Section 10 = Cost Summary

Section 8 - Initial & Capital Tasks and Costs

Property Title: Carlsbad Funding Analysis Dataset: CA004 PAR ID: RO61FIN 04/29/2004

Budget: Phase Budget 002 City of Carlsbad

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
SITE CONSTRUCTION/MAINT.							
Fence, 4' X 6' X 6'	Post & 3/4" Cable	Lin. Ft.	2,185.92	12.00	26,231.04	1.0	26,231.04
Fence - Installed	Chain Link 6'	Lin. Ft.	1,092.96	9.85	10,765.66	1.0	10,765.66
Fence - Installed	Barbed-wire, 4 strd.	Lin. Ft.	6,557.76	2.45	16,066.51	1.0	16,066.51
Gate	16" arm swing	Item	4.50	2,500.00	11,250.00	1.0	11,250.00
Vehicle Barrier	Concrete Bollard	Lin. Ft	1,092.96	8.00	8,743.68	1.0	8,743.68
Sub-Total							73,056.89
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	50.00	44.51	2,225.50	1.0	2,225.50
Plant Ecologist	Vegetation Mapping	L. Hours	32.13	44.51	1,430.11	1.0	1,430.11
Plant Ecologist	Sensitive Plant Species Survey	L. Hours	22.40	44.51	997.14	1.0	997.14
Plant Ecologist	Monit. Enc Bacc & DM	L. Hours	5.20	44.51	231.45	1.0	231.45
Plant Ecologist	Spec:management &	L. Hours	50.00	44.51	2,225.50	1.0	2,225.50
Entomologist	Skipper surveys	L. Hours	7.00	44.51	311.57	1.0	311.57
Entomologist	Ant surveys	L. Hours	18.00	44.51	801.18	1.0	801.18
Herpetologist	Pit-array monitoring	L. Hours	62.40	44.51	2,777.42	1.0	2,777.42
Herpetologist	Pit-array installation/maint	L. Hours	15.60	32.08	500.45	1.0	500.45
Mammalogist	Wildlife Corridors	L. Hours	256.00	44.51	11,394.56	1.0	11,394.56
Ornithologist	CSS, Chap, and grassland	L. Hours	125.23	44.51	5,573.90	1.0	5,573.90
Ornithologist	Riparian	L. Hours	26.40	44.51	1,175.06	1.0	1,175.06
Ornithologist	LBV,WIFL nest monitoring	L. Hours	48.00	44.51	2,136.48	1.0	2,136.48
Ornithologist	CAGN dispersal studies	L. Hours	312.00	44.51	13,887.12	1.0	13,887.12
Science Director	Planning and Review	Hours	45.00	50.73	2,282.85	1.0	2,282.85
Monitor Climate	Analyze data	L. Hours	8.33	44.51	370.92	1.0	370.92
Other	Adaptive management	Item	0.09	30,000.00	2,700.00	1.0	2,700.00
Sub-Total							51,021.21
HABITAT MAINTENANCE							
Erosion Control	Slope Stabilization	L. Hours	160.20	22.76	3,646.15	1.0	3,646.15
Seed Collection	Seed Banking	Accession	0.36	2,500.00	900.00	1.0	900.00
Plant Procurement	Rooted cuttings	Item	90.00	4.00	360.00	1.0	360.00
Exotic Plant Control	Supervision by botantist	L. Hours	27.00	44.51	1,201.77	1.0	1,201.77
Exotic Plant Control	Up-front control	Item	0.09	500,000.00	45,000.00	1.0	45,000.00
Exotic Animal Control	Supervise cowbird removal	L. Hours	3.60	44.51	160.24	1.0	160.24
Exotic Animal Control	Cowbird trap checks-labor	L. Hours	224.00	32.08	7,185.92	1.0	7,185.92
Exotic Animal Control	Cowbird Traps	Item	0.90	500.00	450.00	1.0	450.00
Sub-Total							58,904.08

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
PUBLIC SERVICES							
Patrolling	Supervising officer	L. Hours	160.20	35.19	5,637.44	1.0	5,637.44
Patrolling	4 rangers/ officers	L. Hours	640.80	32.08	20,556.86	1.0	20,556.86
Trail	Maintenance	Mile	6.12	4,000.00	24,480.00	1.0	24,480.00
Sign	Misc	Item	90.00	3.25	292.50	1.0	292.50
Sign	Boundary 8" X 13.5"	Item	365.85	5.25	1,920.71	1.0	1,920.71
Sign	Sign posts u-channel	Item	90.00	11.00	990.00	1.0	990.00
Sign, Redwood	Interpretive 4'X 6'	Item	4.50	1,000.00	4,500.00	1.0	4,500.00
Community Outreach	Public outreach coordinator	L. Hours	160.20	32.08	5,139.22	1.0	5,139.22
Sub-Total							63,516.73
GENERAL MAINTENANCE							
Hauling, Truck	Truckload of trash	Item	9.00	40.00	360.00	1.0	360.00
Sub-Total							360.00
REPORTING							
Database Management	Data analysis and reporting	L. Hours	138.42	44.51	6,161.07	1.0	6,161.07
GIS/CAD Management	Data Management	L. Hours	80.10	44.51	3,565.25	1.0	3,565.25
Annual Reports	Reporting coordination	L. Hours	22.50	44.51	1,001.48	1.0	1,001.48
Management Plan	Initial Report	L. Hours	18.00	44.51	801.18	1.0	801.18
Sub-Total							11,528.98
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	45.00	44.51	2,002.95	1.0	2,002.95
Preserve Office	Janitorial	Sq. Ft.	180.00	1.70	306.00	1.0	306.00
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	180.00	1.00	180.00	1.0	180.00
Telephone Charges, Annual	Cell Phone Charges 8 phones	Year	1.08	720.00	777.60	1.0	777.60
Office Supplies, Year	Supplies	Person	0.90	250.00	225.00	1.0	225.00
Furniture	Desk	Item	0.90	250.00	225.00	1.0	225.00
Furniture	Chair	Item	0.90	150.00	135.00	1.0	135.00
Furniture	Bookcase, 3'x5'	Item	0.18	150.00	27.00	1.0	27.00
Furniture	File cabinet	Item	0.45	400.00	180.00	1.0	180.00
Copier	Copier, 15-18 ppm	Item	0.09	2,500.00	225.00	1.0	225.00
Fax Machine	Standard	Item	0.09	250.00	22.50	1.0	22.50
Telephone	Touch-tone	Item	0.90	55.00	49.50	1.0	49.50
E-Mail	Services	Year	0.09	500.00	45.00	1.0	45.00
Computer, PC & Monitor	133 MHz Pentium	Item	0.90	2,100.00	1,890.00	1.0	1,890.00
Computer software	Microsoft Office Pkg	Item	0.72	450.00	324.00	1.0	324.00
Computer software	Consulting	Hour	0.09	1,500.00	135.00	1.0	135.00
Laser Printer	600 DPI	Item	0.18	840.00	151.20	1.0	151.20
Deskjet Printer	HP DeskJet 895	Item	0.27	499.00	134.73	1.0	134.73
Sub-Total							7,035.48

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
FIELD EQUIPMENT							
Vehicle	Toyota extra-cab 4X4	Item	0.81	24,000.00	19,440.00	1.0	19,440.00
Vehicle	Fuel (444 gallons/vehicle/year	Gallons	359.64	2.00	719.28	1.0	719.28
Vehicle	Maintenance	Year	0.09	5,000.00	450.00	1.0	450.00
Vehicle Insurance	Insurance (9 x $1,632/yr))	Year	0.09	14,688.80	1,321.99	1.0	1,321.99
Other	all supplies 1st yr, see text	Item	0.09	34,495.70	3,104.61	1.0	3,104.61
Sub-Total							25,035.88
OPERATIONS							
Audit	CPA Audit	Acre	642.15	0.55	353.18	1.0	353.18
Insurance	Liability/Fee	Acres	642.15	0.37	237.60	1.0	237.60
Sub-Total							590.78
CONTINGENCY & ADMINISTRATION							
Contingency							29,105.00
Administration							76,837.21
Sub-Total							105,942.21
Total							396,992.24

Section 9 - Ongoing Tasks and Costs

Property Title: Carlsbad Funding Analysis Dataset: CA004 PAR ID: RO61FIN 04/29/2004

Budget: Phase Budget 002 City of Carlsbad

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
SITE CONSTRUCTION/MAINT.							
Fence, 4' X 6' X 6'	Post & 3/4" Cable	Lin. Ft.	2,185.92	12.00	26,231.04	25	1,049.24
Fence, 4' X 6' X 6'	Post & 3/4" Cable Maintenance	Lin. Ft.	218.59	12.00	2,623.08	1	2,623.08
Fence - Installed	Chain Link 6'	Lin. Ft.	1,092.96	9.85	10,765.66	25	430.63
Fence - Installed	Chain Link 6' Mainenance	Lin. Ft.	109.30	9.85	1,076.61	1	1,076.61
Fence - Installed	Barbed-wire, 4 strd.	Lin. Ft.	6,557.76	2.45	16,066.51	25	642.66
Fence - Installed	Barbed-wire, 4 strd.Maintain	Lin. Ft.	655.78	2.45	1,606.66	1	1,606.66
Gate	16" arm swing	Item	4.50	2,500.00	11,250.00	20	562.50
Vehicle Barrier	Concrete Bollard	Lin. Ft	1,092.96	8.00	8,743.68	25	349.75
Vehicle Barrier	Concrete Bollard maintain	Lin. Ft	109.30	8.00	874.40	1	874.40
Sub-Total							9,215.53
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	50.00	44.51	2,225.50	1	2,225.50
Plant Ecologist	Vegetation Mapping	L. Hours	32.13	44.51	1,430.11	5	286.02
Plant Ecologist	Sensitive Plant Species Survey	L. Hours	22.40	44.51	997.14	1	997.14
Plant Ecologist	Monit. Enc Bacc & DM	L. Hours	5.20	44.51	231.45	5	46.29
Plant Ecologist	Spec:management &	L. Hours	50.00	44.51	2,225.50	1	2,225.50
Entomologist	Skipper surveys	L. Hours	7.00	44.51	311.57	1	311.57
Entomologist	Ant surveys	L. Hours	18.00	44.51	801.18	1	801.18
Herpetologist	Pit-array monitoring	L. Hours	62.40	44.51	2,777.42	2	1,388.71
Herpetologist	Pit-array installation/maint	L. Hours	15.60	32.08	500.45	3	166.82
Mammalogist	Wildlife Corridors	L. Hours	256.00	44.51	11,394.56	1	11,394.56
Ornithologist	CSS, Chap, and grassland	L. Hours	125.23	44.51	5,573.90	1	5,573.90
Ornithologist	Riparian	L. Hours	26.40	44.51	1,175.06	1	1,175.06
Ornithologist	LBV,WIFL nest monitoring	L. Hours	48.00	44.51	2,136.48	1	2,136.48
Ornithologist	CAGN dispersal studies	L. Hours	312.00	44.51	13,887.12	6	2,314.52
Science Director	Planning and Review	Hours	45.00	50.73	2,282.85	1	2,282.85
Monitor Climate	Analyze data	L. Hours	8.33	44.51	370.92	1	370.92
Other	Adaptive management	Item	0.09	30,000.00	2,700.00	1	2,700.00
Sub-Total							36,397.02
HABITAT MAINTENANCE							
Erosion Control	Slope Stabilization	L. Hours	160.20	22.76	3,646.15	5	729.23
Seed Collection	Seed Banking	Accession	0.36	2,500.00	900.00	15	60.00
Plant Procurement	Rooted cuttings	Item	90.00	4.00	360.00	5	72.00
Exotic Plant Control	Supervision by botantist	L. Hours	27.00	44.51	1,201.77	1	1,201.77
Exotic Plant Control	Laborers (5)	L. Hours	801.00	22.76	18,230.76	1	18,230.76
Exotic Animal Control	Supervise cowbird removal	L. Hours	3.60	44.51	160.24	1	160.24
Exotic Animal Control	Cowbird trap checks-labor	L. Hours	224.00	32.08	7,185.92	1	7,185.92
Exotic Animal Control	Cowbird Traps	Item	0.90	500.00	450.00	5	90.00
Sub-Total							27,729.92

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
PUBLIC SERVICES							
Patrolling	Supervising officer	L. Hours	160.20	35.19	5,637.44	1	5,637.44
Patrolling	4 rangers/ officers	L. Hours	640.80	32.08	20,556.86	1	20,556.86
Trail	Maintenance	Mile	6.12	4,000.00	24,480.00	5	4,896.00
Sign	Misc	Item	90.00	3.25	292.50	7	41.79
Sign	Boundary 8" X 13.5"	Item	365.85	5.25	1,920.71	10	192.07
Sign	Sign posts u-channel	Item	90.00	11.00	990.00	10	99.00
Sign, Redwood	Interpretive 4'X 6'	Item	4.50	1,000.00	4,500.00	15	300.00
Community Outreach	Public outreach coordinator	L. Hours	160.20	32.08	5,139.22	1	5,139.22
Sub-Total							36,862.38
GENERAL MAINTENANCE							
Hauling, Truck	Truckload of trash	Item	9.00	40.00	360.00	1	360.00
Sub-Total							360.00
REPORTING							
Database Management	Data analysis and reporting	L. Hours	138.42	44.51	6,161.07	1	6,161.07
GIS/CAD Management	Data Management	L. Hours	80.10	44.51	3,565.25	1	3,565.25
Annual Reports	Reporting coordination	L. Hours	22.50	44.51	1,001.48	1	1,001.48
Management Plan	Initial Report	L. Hours	18.00	44.51	801.18	3	267.06
Sub-Total							10,994.86
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	45.00	44.51	2,002.95	1	2,002.95
Preserve Office	Janitorial	Sq. Ft.	180.00	1.70	306.00	30	10.20
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	180.00	1.00	180.00	1	180.00
Telephone Charges, Annual	Cell Phone Charges 8 phones	Year	1.08	720.00	777.60	1	777.60
Office Supplies, Year	Supplies	Person	0.90	250.00	225.00	1	225.00
Furniture	Desk	Item	0.90	250.00	225.00	10	22.50
Furniture	Chair	Item	0.90	150.00	135.00	5	27.00
Furniture	Bookcase, 3'x5'	Item	0.18	150.00	27.00	8	3.38
Furniture	File cabinet	Item	0.45	400.00	180.00	10	18.00
Copier	Copier, 15-18 ppm	Item	0.09	2,500.00	225.00	8	28.13
Fax Machine	Standard	Item	0.09	250.00	22.50	5	4.50
Telephone	Touch-tone	Item	0.90	55.00	49.50	5	9.90
E-Mail	Services	Year	0.09	500.00	45.00	1	45.00
Computer, PC & Monitor	133 MHz Pentium	Item	0.90	2,100.00	1,890.00	4	472.50
Computer software	Microsoft Office Pkg	Item	0.72	450.00	324.00	4	81.00
Computer software	Consulting	Hour	0.09	1,500.00	135.00	1	135.00
Laser Printer	600 DPI	Item	0.18	840.00	151.20	4	37.80
Deskjet Printer	HP DeskJet 895	Item	0.27	499.00	134.73	6	22.46
Sub-Total							4,102.92

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
FIELD EQUIPMENT							
Vehicle	Toyota extra-cab 4X4	Item	0.81	24,000.00	19,440.00	8	2,430.00
Vehicle	Fuel (444 gallons/vehicle/year	Gallons	359.64	2.00	719.28	1	719.28
Vehicle	Maintenance	Year	0.09	5,000.00	450.00	1	450.00
Vehicle Insurance	Insurance (9 x $1,632/yr))	Year	0.09	14,688.80	1,321.99	1	1,321.99
Other	all supplies, see text	Item	0.09	13,870.59	1,248.35	1	1,248.35
Sub-Total							6,169.62
OPERATIONS							
Audit	CPA Audit	Acre	642.15	0.55	353.18	1	353.18
Insurance	Liability/Fee	Acres	642.15	0.37	237.60	1	237.60
Sub-Total							590.78
CONTINGENCY & ADMINISTRATION							
Contingency							13,242.30
Administration							34,959.68
Sub-Total							48,201.98
Total							180,625.01

Section 10 - Financial Summary

Property Title: Carlsbad Funding Analysis | Dataset: CA004 | PAR ID: RO61FIN | 04/29/2004

Phase Budget 002 City of Carlsbad (603 ac.)

	Rate %	Total $
INITIAL FINANCIAL REQUIREMENTS		
I & C Revenue		0
I & C Management Costs		291,050
I & C Contingency Expense	10.00	29,105
Total I & C Management Costs		320,155
I & C Administrative Costs of Total I & C Management Costs	24.00	76,837
Total I & C Costs		396,992
Net I & C Management and Administrative Costs		396,992
ANNUAL ONGOING FINANCIAL REQUIREMENTS		
Ongoing Costs		132,423
Ongoing Contingency Expense	10.00	13,242
Total Ongoing Management Costs		145,665
Ongoing Administrative Costs of Total Ongoing Management costs	24.00	34,960
Total Ongoing Costs		180,625
ENDOWMENT REQUIREMENTS FOR ONGOING STEWARDSHIP		
Endowment to Provide Income of $180,625		4,013,889
Endowment per Acre is $6,657.		
Ongoing Management Costs Based on 4.50% of Endowment per Year.		
Ongoing Management Funding is $180,625 per Year Resulting in $300 per Acre per Year.		
TOTAL CONTRIBUTION		4,410,881

Appendix 4.

PAR for Future Biological Management Entity

Section 8 = Initial and Capital Funds Required
Section 9 = Ongoing Funds Required
Section 10 = Cost Summary

Section 8 - Initial & Capital Tasks and Costs

Property Title: Carlsbad Funding Analysis Dataset: CA004 PAR ID: RO61FIN 05/05/2004

Budget: Phase Budget 003 Future Bio

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
SITE CONSTRUCTION/MAINT.							
Fence, 4' X 6' X 6'	Post & 3/4" Cable	Lin. Ft.	5,829.12	12.00	69,949.44	1.0	69,949.44
Fence - Installed	Chain Link 6'	Lin. Ft.	2,914.56	9.85	28,708.42	1.0	28,708.42
Fence - Installed	Barbed-wire, 4 strd.	Lin. Ft.	17,487.36	2.45	42,844.03	1.0	42,844.03
Gate	16" arm swing	Item	12.00	2,500.00	30,000.00	1.0	30,000.00
Vehicle Barrier	Concrete Bollard	Lin. Ft	2,914.56	8.00	23,316.48	1.0	23,316.48
Sub-Total							194,818.37
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	50.00	44.51	2,225.50	1.0	2,225.50
Plant Ecologist	Vegetation Mapping	L. Hours	85.68	44.51	3,813.62	1.0	3,813.62
Plant Ecologist	Vernal Pool Measure variables	L. Hours	72.00	44.51	3,204.72	1.0	3,204.72
Plant Ecologist	Sensitive Plant Species Survey	L. Hours	93.19	44.51	4,148.10	1.0	4,148.10
Plant Ecologist	Monit. Enc Bacc & DM	L. Hours	6.00	44.51	267.06	1.0	267.06
Plant Ecologist	Spec:management &	L. Hours	50.00	44.51	2,225.50	1.0	2,225.50
Entomologist	Fairy Shrimp surveys	L. Hours	50.03	44.51	2,226.84	1.0	2,226.84
Entomologist	Skipper surveys	L. Hours	19.00	44.51	845.69	1.0	845.69
Entomologist	Ant surveys	L. Hours	48.00	44.51	2,136.48	1.0	2,136.48
Herpetologist	Vernal Pool/Spadefoot monitor	L. Hours	40.02	44.51	1,781.29	1.0	1,781.29
Herpetologist	Pit-array monitoring	L. Hours	48.00	44.51	2,136.48	1.0	2,136.48
Herpetologist	Pit-array installation/maint	L. Hours	12.00	32.08	384.96	1.0	384.96
Mammalogist	Wildlife Corridors	L. Hours	64.00	44.51	2,848.64	1.0	2,848.64
Ornithologist	CSS, Chap, and grassland	L. Hours	247.54	44.51	11,018.18	1.0	11,018.18
Ornithologist	Riparian	L. Hours	76.80	44.51	3,418.37	1.0	3,418.37
Ornithologist	LBV,WIFL nest monitoring	L. Hours	61.44	44.51	2,734.69	1.0	2,734.69
Ornithologist	CAGN dispersal studies	L. Hours	240.00	44.51	10,682.40	1.0	10,682.40
Science Director	Planning and Review	Hours	120.00	50.73	6,087.60	1.0	6,087.60
Monitor Climate	Analyze data	L. Hours	8.33	44.51	370.92	1.0	370.92
Other	Adaptive management	Item	0.24	30,000.00	7,200.00	1.0	7,200.00
Sub-Total							69,757.04
HABITAT MAINTENANCE							
Erosion Control	Slope Stabilization	L. Hours	427.20	22.76	9,723.07	1.0	9,723.07
Seed Collection	Seed Banking	Accession	0.96	2,500.00	2,400.00	1.0	2,400.00
Plant Procurement	Rooted cuttings	Item	240.00	4.00	960.00	1.0	960.00
Exotic Plant Control	Supervision by botantist	L. Hours	72.00	44.51	3,204.72	1.0	3,204.72
Exotic Plant Control	Up-front control	Item	0.24	500,000.00	120,000.00	1.0	120,000.00
Exotic Animal Control	Supervise cowbird removal	L. Hours	9.60	44.51	427.30	1.0	427.30
Exotic Animal Control	Cowbird trap checks-labor	L. Hours	268.80	32.08	8,623.10	1.0	8,623.10
Exotic Animal Control	Cowbird Traps	Item	2.40	500.00	1,200.00	1.0	1,200.00
Sub-Total							146,538.19

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
PUBLIC SERVICES							
Patrolling	Supervising officer	L. Hours	427.20	35.19	15,033.17	1.0	15,033.17
Patrolling	4 rangers/ officers	L. Hours	1,708.80	32.08	54,818.30	1.0	54,818.30
Trail	Maintenance	Mile	16.32	4,000.00	65,280.00	1.0	65,280.00
Sign	Misc	Item	240.00	3.25	780.00	1.0	780.00
Sign	Boundary 8" X 13.5"	Item	975.60	5.25	5,121.90	1.0	5,121.90
Sign	Sign posts u-channel	Item	240.00	11.00	2,640.00	1.0	2,640.00
Sign, Redwood	Interpretive 4'X 6'	Item	12.00	1,000.00	12,000.00	1.0	12,000.00
Community Outreach	Public outreach coordinator	L. Hours	427.20	32.08	13,704.58	1.0	13,704.58
Sub-Total							169,377.95
GENERAL MAINTENANCE							
Hauling, Truck	Truckload of trash	Item	24.00	40.00	960.00	1.0	960.00
Sub-Total							960.00
REPORTING							
Database Management	Data analysis and reporting	L. Hours	369.12	44.51	16,429.53	1.0	16,429.53
GIS/CAD Management	Data Management	L. Hours	213.60	44.51	9,507.34	1.0	9,507.34
Annual Reports	Reporting coordination	L. Hours	60.00	44.51	2,670.60	1.0	2,670.60
Management Plan	Initial Report	L. Hours	48.00	44.51	2,136.48	1.0	2,136.48
Sub-Total							30,743.95
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	120.00	44.51	5,341.20	1.0	5,341.20
Preserve Office	Janitorial	Sq. Ft.	480.00	1.70	816.00	1.0	816.00
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	480.00	1.00	480.00	1.0	480.00
Telephone Charges, Annual	Cell Phone Charges 8 phones	Year	2.88	720.00	2,073.60	1.0	2,073.60
Office Supplies, Year	Supplies	Person	2.40	250.00	600.00	1.0	600.00
Furniture	Desk	Item	2.40	250.00	600.00	1.0	600.00
Furniture	Chair	Item	2.40	150.00	360.00	1.0	360.00
Furniture	Bookcase, 3'x5'	Item	0.48	150.00	72.00	1.0	72.00
Furniture	File cabinet	Item	1.20	400.00	480.00	1.0	480.00
Copier	Copier, 15-18 ppm	Item	0.24	2,500.00	600.00	1.0	600.00
Fax Machine	Standard	Item	0.24	250.00	60.00	1.0	60.00
Telephone	Touch-tone	Item	2.40	55.00	132.00	1.0	132.00
E-Mail	Services	Year	0.24	500.00	120.00	1.0	120.00
Computer, PC & Monitor	133 MHz Pentium	Item	2.40	2,100.00	5,040.00	1.0	5,040.00
Computer software	Microsoft Office Pkg	Item	1.92	450.00	864.00	1.0	864.00
Computer software	Consulting	Hour	0.24	1,500.00	360.00	1.0	360.00
Laser Printer	600 DPI	Item	0.48	840.00	403.20	1.0	403.20
Deskjet Printer	HP DeskJet 895	Item	0.72	499.00	359.28	1.0	359.28
Sub-Total							18,761.28

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
FIELD EQUIPMENT							
Vehicle	Toyota extra-cab 4X4	Item	2.16	24,000.00	51,840.00	1.0	51,840.00
Vehicle	Fuel (444 gallons/vehicle/year	Gallons	959.04	2.00	1,918.08	1.0	1,918.08
Vehicle	Maintenance	Year	0.24	5,000.00	1,200.00	1.0	1,200.00
Vehicle Insurance	Insurance (9 x $1,632/yr))	Year	0.24	14,688.80	3,525.31	1.0	3,525.31
Other	all supplies 1st yr, see text	Item	0.24	34,495.70	8,278.97	1.0	8,278.97
Sub-Total							66,762.36
OPERATIONS							
Audit	CPA Audit	Acre	1,712.40	0.55	941.82	1.0	941.82
Insurance	Liability/Fee	Acres	1,712.40	0.37	633.59	1.0	633.59
Sub-Total							1,575.41
CONTINGENCY & ADMINISTRATION							
Contingency							69,929.46
Administration							184,613.76
Sub-Total							254,543.22
Total							953,837.77

Section 9 - Ongoing Tasks and Costs

Property Title: Carlsbad Funding Analysis Dataset: CA004 PAR ID: RO61FIN 05/05/2004

Budget: Phase Budget 003 Future Bio

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
SITE CONSTRUCTION/MAINT.							
Fence, 4' X 6' X 6'	Post & 3/4" Cable	Lin. Ft.	5,829.12	12.00	69,949.44	25	2,797.98
Fence, 4' X 6' X 6'	Post & 3/4" Cable Maintenance	Lin. Ft.	582.91	12.00	6,994.92	1	6,994.92
Fence - Installed	Chain Link 6'	Lin. Ft.	2,914.56	9.85	28,708.42	25	1,148.34
Fence - Installed	Chain Link 6' Mainenance	Lin. Ft.	291.46	9.85	2,870.88	1	2,870.88
Fence - Installed	Barbed-wire, 4 strd.	Lin. Ft.	17,487.36	2.45	42,844.03	25	1,713.76
Fence - Installed	Barbed-wire, 4 strd.Maintain	Lin. Ft.	1,748.74	2.45	4,284.41	1	4,284.41
Gate	16" arm swing	Item	12.00	2,500.00	30,000.00	20	1,500.00
Vehicle Barrier	Concrete Bollard	Lin. Ft	2,914.56	8.00	23,316.48	25	932.66
Vehicle Barrier	Concrete Bollard maintain	Lin. Ft	291.46	8.00	2,331.68	1	2,331.68
Sub-Total							24,574.63
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	50.00	44.51	2,225.50	1	2,225.50
Plant Ecologist	Vegetation Mapping	L. Hours	85.68	44.51	3,813.62	5	762.72
Plant Ecologist	Vernal Pool Measure variables	L. Hours	72.00	44.51	3,204.72	1	3,204.72
Plant Ecologist	Sensitive Plant Species Survey	L. Hours	93.19	44.51	4,148.10	1	4,148.10
Plant Ecologist	Monit. Enc Bacc & DM	L. Hours	6.00	44.51	267.06	5	53.41
Plant Ecologist	Spec:management &	L. Hours	50.00	44.51	2,225.50	1	2,225.50
Entomologist	Fairy Shrimp surveys	L. Hours	50.03	44.51	2,226.84	1	2,226.84
Entomologist	Skipper surveys	L. Hours	19.00	44.51	845.69	1	845.69
Entomologist	Ant surveys	L. Hours	48.00	44.51	2,136.48	1	2,136.48
Herpetologist	Vernal Pool/Spadefoot monitor	L. Hours	40.02	44.51	1,781.29	1	1,781.29
Herpetologist	Pit-array monitoring	L. Hours	48.00	44.51	2,136.48	2	1,068.24
Herpetologist	Pit-array installation/maint	L. Hours	12.00	32.08	384.96	3	128.32
Mammalogist	Wildlife Corridors	L. Hours	64.00	44.51	2,848.64	1	2,848.64
Ornithologist	CSS, Chap, and grassland	L. Hours	247.54	44.51	11,018.18	1	11,018.18
Ornithologist	Riparian	L. Hours	76.80	44.51	3,418.37	1	3,418.37
Ornithologist	LBV,WIFL nest monitoring	L. Hours	61.44	44.51	2,734.69	1	2,734.69
Ornithologist	CAGN dispersal studies	L. Hours	240.00	44.51	10,682.40	6	1,780.40
Science Director	Planning and Review	Hours	120.00	50.73	6,087.60	1	6,087.60
Monitor Climate	Analyze data	L. Hours	8.33	44.51	370.92	1	370.92
Other	Adaptive management	Item	0.24	30,000.00	7,200.00	1	7,200.00
Sub-Total							56,265.61
HABITAT MAINTENANCE							
Erosion Control	Slope Stabilization	L. Hours	427.20	22.76	9,723.07	5	1,944.61
Seed Collection	Seed Banking	Accession	0.96	2,500.00	2,400.00	15	160.00
Plant Procurement	Rooted cuttings	Item	240.00	4.00	960.00	5	192.00
Exotic Plant Control	Supervision by botantist	L. Hours	72.00	44.51	3,204.72	1	3,204.72
Exotic Plant Control	Laborers (5)	L. Hours	2,136.00	22.76	48,615.36	1	48,615.36
Exotic Animal Control	Supervise cowbird removal	L. Hours	9.60	44.51	427.30	1	427.30
Exotic Animal Control	Cowbird trap checks-labor	L. Hours	268.80	32.08	8,623.10	1	8,623.10
Exotic Animal Control	Cowbird Traps	Item	2.40	500.00	1,200.00	5	240.00

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
Sub-Total							63,407.09
PUBLIC SERVICES							
Patrolling	Supervising officer	L. Hours	427.20	35.19	15,033.17	1	15,033.17
Patrolling	4 rangers/ officers	L. Hours	1,708.80	32.08	54,818.30	1	54,818.30
Trail	Maintenance	Mile	16.32	4,000.00	65,280.00	5	13,056.00
Sign	Misc	Item	240.00	3.25	780.00	7	111.43
Sign	Boundary 8" X 13.5"	Item	975.60	5.25	5,121.90	10	512.19
Sign	Sign posts u-channel	Item	240.00	11.00	2,640.00	10	264.00
Sign, Redwood	Interpretive 4'X 6'	Item	12.00	1,000.00	12,000.00	15	800.00
Community Outreach	Public outreach coordinator	L. Hours	427.20	32.08	13,704.58	1	13,704.58
Sub-Total							98,299.67
GENERAL MAINTENANCE							
Hauling, Truck	Truckload of trash	Item	24.00	40.00	960.00	1	960.00
Sub-Total							960.00
REPORTING							
Database Management	Data analysis and reporting	L. Hours	369.12	44.51	16,429.53	1	16,429.53
GIS/CAD Management	Data Management	L. Hours	213.60	44.51	9,507.34	1	9,507.34
Annual Reports	Reporting coordination	L. Hours	60.00	44.51	2,670.60	1	2,670.60
Management Plan	Initial Report	L. Hours	48.00	44.51	2,136.48	3	712.16
Sub-Total							29,319.63
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	120.00	44.51	5,341.20	1	5,341.20
Preserve Office	Janitorial	Sq. Ft.	480.00	1.70	816.00	30	27.20
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	480.00	1.00	480.00	1	480.00
Telephone Charges, Annual	Cell Phone Charges 8 phones	Year	2.88	720.00	2,073.60	1	2,073.60
Office Supplies, Year	Supplies	Person	2.40	250.00	600.00	1	600.00
Furniture	Desk	Item	2.40	250.00	600.00	10	60.00
Furniture	Chair	Item	2.40	150.00	360.00	5	72.00
Furniture	Bookcase, 3'x5'	Item	0.48	150.00	72.00	8	9.00
Furniture	File cabinet	Item	1.20	400.00	480.00	10	48.00
Copier	Copier, 15-18 ppm	Item	0.24	2,500.00	600.00	8	75.00
Fax Machine	Standard	Item	0.24	250.00	60.00	5	12.00
Telephone	Touch-tone	Item	2.40	55.00	132.00	5	26.40
E-Mail	Services	Year	0.24	500.00	120.00	1	120.00
Computer, PC & Monitor	133 MHz Pentium	Item	2.40	2,100.00	5,040.00	4	1,260.00
Computer software	Microsoft Office Pkg	Item	1.92	450.00	864.00	4	216.00
Computer software	Consulting	Hour	0.24	1,500.00	360.00	1	360.00
Laser Printer	600 DPI	Item	0.48	840.00	403.20	4	100.80
Deskjet Printer	HP DeskJet 895	Item	0.72	499.00	359.28	6	59.88
Sub-Total							10,941.08

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
FIELD EQUIPMENT							
Vehicle	Toyota extra-cab 4X4	Item	2.16	24,000.00	51,840.00	8	6,480.00
Vehicle	Fuel (444 gallons/vehicle/year	Gallons	959.04	2.00	1,918.08	1	1,918.08
Vehicle	Maintenance	Year	0.24	5,000.00	1,200.00	1	1,200.00
Vehicle Insurance	Insurance (9 x $1,632/yr))	Year	0.24	14,688.80	3,525.31	1	3,525.31
Other	all supplies, see text	Item	0.24	13,870.59	3,328.94	1	3,328.94
Sub-Total							16,452.33
OPERATIONS							
Audit	CPA Audit	Acre	1,712.40	0.55	941.82	1	941.82
Insurance	Liability/Fee	Acres	1,712.40	0.37	633.59	1	633.59
Sub-Total							1,575.41
CONTINGENCY & ADMINISTRATION							
Contingency							30,179.55
Administration							79,674.00
Sub-Total							109,853.55
Total							411,649.00

Phase Budget 003 Future Bio Management Entity (1731 ac.)

	Rate %	Total $
INITIAL FINANCIAL REQUIREMENTS		
I & C Revenue		0
I & C Management Costs		699,294
I & C Contingency Expense	10.00	69,929
Total I & C Management Costs		769,223
I & C Administrative Costs of Total I & C Management Costs	24.00	184,614
Total I & C Costs		953,837
Net I & C Management and Administrative Costs		953,837
ANNUAL ONGOING FINANCIAL REQUIREMENTS		
Ongoing Costs		301,795
Ongoing Contingency Expense	10.00	30,180
Total Ongoing Management Costs		331,975
Ongoing Administrative Costs of Total Ongoing Management costs	24.00	79,674
Total Ongoing Costs		411,650
ENDOWMENT REQUIREMENTS FOR ONGOING STEWARDSHIP		
Endowment to Provide Income of $411,650		9,147,778
Endowment per Acre is $5,285.		
Ongoing Management Costs Based on 4.50% of Endowment per Year.		
Ongoing Management Funding is $411,650 per Year Resulting in $238 per Acre per Year.		
TOTAL CONTRIBUTION		10,101,615

Appendix 5.

PAR for Other Public or Semi-public Entities

Section 8 = Initial and Capital Funds Required
Section 9 = Ongoing Funds Required
Section 10 = Cost Summary

Section 8 - Initial & Capital Tasks and Costs

Property Title: Carlsbad Funding Analysis Dataset: CA004 PAR ID: RO61FIN 05/05/2004

Budget: Phase Budget 004 Other public entities

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
SITE CONSTRUCTION/MAINT.							
Fence, 4' X 6' X 6'	Post & 3/4" Cable	Lin. Ft.	1,214.40	12.00	14,572.80	1.0	14,572.80
Fence - Installed	Chain Link 6'	Lin. Ft.	607.20	9.85	5,980.92	1.0	5,980.92
Fence - Installed	Barbed-wire, 4 strd.	Lin. Ft.	3,643.20	2.45	8,925.84	1.0	8,925.84
Gate	16" arm swing	Item	2.50	2,500.00	6,250.00	1.0	6,250.00
Vehicle Barrier	Concrete Bollard	Lin. Ft	607.20	8.00	4,857.60	1.0	4,857.60
Sub-Total							40,587.16
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	50.00	44.51	2,225.50	1.0	2,225.50
Plant Ecologist	Vegetation Mapping	L. Hours	17.85	44.51	794.50	1.0	794.50
Plant Ecologist	Vernal Pool Measure variables	L. Hours	72.00	44.51	3,204.72	1.0	3,204.72
Plant Ecologist	Sensitive Plant Species Survey	L. Hours	52.87	44.51	2,353.25	1.0	2,353.25
Plant Ecologist	Spec:management &	L. Hours	50.00	44.51	2,225.50	1.0	2,225.50
Entomologist	Fairy Shrimp surveys	L. Hours	24.98	44.51	1,111.86	1.0	1,111.86
Entomologist	Skipper surveys	L. Hours	12.00	44.51	534.12	1.0	534.12
Entomologist	Ant surveys	L. Hours	10.00	44.51	445.10	1.0	445.10
Herpetologist	Vernal Pool/Spadefoot monitor	L. Hours	19.98	44.51	889.31	1.0	889.31
Mammalogist	Wildlife Corridors	L. Hours	160.00	44.51	7,121.60	1.0	7,121.60
Ornithologist	CSS, Chap, and grassland	L. Hours	34.95	44.51	1,555.51	1.0	1,555.51
Ornithologist	Riparian	L. Hours	2.40	44.51	106.82	1.0	106.82
Ornithologist	LBV,WIFL nest monitoring	L. Hours	1.92	44.51	85.46	1.0	85.46
Ornithologist	Lagoons	L. Hours	362.08	44.51	16,116.18	1.0	16,116.18
Science Director	Planning and Review	Hours	25.00	50.73	1,268.25	1.0	1,268.25
Monitor Climate	Analyze data	L. Hours	8.33	44.51	370.92	1.0	370.92
Other	Adaptive management	Item	0.05	30,000.00	1,500.00	1.0	1,500.00
Sub-Total							41,908.60
HABITAT MAINTENANCE							
Erosion Control	Slope Stabilization	L. Hours	89.00	22.76	2,025.64	1.0	2,025.64
Seed Collection	Seed Banking	Accession	0.20	2,500.00	500.00	1.0	500.00
Plant Procurement	Rooted cuttings	Item	50.00	4.00	200.00	1.0	200.00
Exotic Plant Control	Supervision by botantist	L. Hours	15.00	44.51	667.65	1.0	667.65
Exotic Plant Control	Up-front control	Item	0.05	500,000.00	25,000.00	1.0	25,000.00
Exotic Animal Control	Supervise cowbird removal	L. Hours	2.00	44.51	89.02	1.0	89.02
Exotic Animal Control	Cowbird Traps	Item	0.50	500.00	250.00	1.0	250.00
Sub-Total							28,732.31

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
PUBLIC SERVICES							
Patrolling	Supervising officer	L. Hours	89.00	35.19	3,131.91	1.0	3,131.91
Patrolling	4 rangers/ officers	L. Hours	356.00	32.08	11,420.48	1.0	11,420.48
Trail	Maintenance	Mile	3.40	4,000.00	13,600.00	1.0	13,600.00
Sign	Misc	Item	50.00	3.25	162.50	1.0	162.50
Sign	Boundary 8" X 13.5"	Item	203.25	5.25	1,067.06	1.0	1,067.06
Sign	Sign posts u-channel	Item	50.00	11.00	550.00	1.0	550.00
Sign, Redwood	Interpretive 4'X 6'	Item	2.50	1,000.00	2,500.00	1.0	2,500.00
Community Outreach	Public outreach coordinator	L. Hours	89.00	32.08	2,855.12	1.0	2,855.12
Sub-Total							35,287.07
GENERAL MAINTENANCE							
Hauling, Truck	Truckload of trash	Item	5.00	40.00	200.00	1.0	200.00
Sub-Total							200.00
REPORTING							
Database Management	Data analysis and reporting	L. Hours	76.90	44.51	3,422.82	1.0	3,422.82
GIS/CAD Management	Data Management	L. Hours	44.50	44.51	1,980.70	1.0	1,980.70
Annual Reports	Reporting coordination	L. Hours	12.50	44.51	556.38	1.0	556.38
Management Plan	Initial Report	L. Hours	10.00	44.51	445.10	1.0	445.10
Sub-Total							6,405.00
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	25.00	44.51	1,112.75	1.0	1,112.75
Preserve Office	Janitorial	Sq. Ft.	100.00	1.70	170.00	1.0	170.00
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	100.00	1.00	100.00	1.0	100.00
Telephone Charges, Annual	Cell Phone Charges 8 phones	Year	0.60	720.00	432.00	1.0	432.00
Office Supplies, Year	Supplies	Person	0.50	250.00	125.00	1.0	125.00
Furniture	Desk	Item	0.50	250.00	125.00	1.0	125.00
Furniture	Chair	Item	0.50	150.00	75.00	1.0	75.00
Furniture	Bookcase, 3'x5'	Item	0.10	150.00	15.00	1.0	15.00
Furniture	File cabinet	Item	0.25	400.00	100.00	1.0	100.00
Copier	Copier, 15-18 ppm	Item	0.05	2,500.00	125.00	1.0	125.00
Fax Machine	Standard	Item	0.05	250.00	12.50	1.0	12.50
Telephone	Touch-tone	Item	0.50	55.00	27.50	1.0	27.50
E-Mail	Services	Year	0.05	500.00	25.00	1.0	25.00
Computer, PC & Monitor	133 MHz Pentium	Item	0.50	2,100.00	1,050.00	1.0	1,050.00
Computer software	Microsoft Office Pkg	Item	0.40	450.00	180.00	1.0	180.00
Computer software	Consulting	Hour	0.05	1,500.00	75.00	1.0	75.00
Laser Printer	600 DPI	Item	0.10	840.00	84.00	1.0	84.00
Deskjet Printer	HP DeskJet 895	Item	0.15	499.00	74.85	1.0	74.85
Sub-Total							3,908.60

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
FIELD EQUIPMENT							
Vehicle	Toyota extra-cab 4X4	Item	0.45	24,000.00	10,800.00	1.0	10,800.00
Vehicle	Fuel (444 gallons/vehicle/year	Gallons	199.80	2.00	399.60	1.0	399.60
Vehicle	Maintenance	Year	0.05	5,000.00	250.00	1.0	250.00
Vehicle Insurance	Insurance (9 x $1,632/yr))	Year	0.05	14,688.80	734.44	1.0	734.44
Other	all supplies 1st yr, see text	Item	0.05	34,495.70	1,724.79	1.0	1,724.79
Sub-Total							13,908.83
OPERATIONS							
Audit	CPA Audit	Acre	356.75	0.55	196.21	1.0	196.21
Insurance	Liability/Fee	Acres	356.75	0.37	132.00	1.0	132.00
Sub-Total							328.21
CONTINGENCY & ADMINISTRATION							
Contingency							17,126.58
Administration							45,214.17
Sub-Total							62,340.75
Total							233,606.53

Section 9 - Ongoing Tasks and Costs

Property Title: Carlsbad Funding Analysis Dataset: CA004 PAR ID: RO61FIN 05/05/2004

Budget: Phase Budget 004 Other public entities

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
SITE CONSTRUCTION/MAINT.							
Fence, 4' X 6' X 6'	Post & 3/4" Cable	Lin. Ft.	1,214.40	12.00	14,572.80	25	582.91
Fence, 4' X 6' X 6'	Post & 3/4" Cable Maintenance	Lin. Ft.	121.44	12.00	1,457.28	1	1,457.28
Fence - Installed	Chain Link 6'	Lin. Ft.	607.20	9.85	5,980.92	25	239.24
Fence - Installed	Chain Link 6' Mainenance	Lin. Ft.	60.72	9.85	598.09	1	598.09
Fence - Installed	Barbed-wire, 4 strd.	Lin. Ft.	3,643.20	2.45	8,925.84	25	357.03
Fence - Installed	Barbed-wire, 4 strd.Maintain	Lin. Ft.	364.32	2.45	892.58	1	892.58
Gate	16" arm swing	Item	2.50	2,500.00	6,250.00	20	312.50
Vehicle Barrier	Concrete Bollard	Lin. Ft	607.20	8.00	4,857.60	25	194.30
Vehicle Barrier	Concrete Bollard maintain	Lin. Ft	60.72	8.00	485.76	1	485.76
Sub-Total							5,119.69
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	50.00	44.51	2,225.50	1	2,225.50
Plant Ecologist	Vegetation Mapping	L. Hours	17.85	44.51	794.50	5	158.90
Plant Ecologist	Vernal Pool Measure variables	L. Hours	72.00	44.51	3,204.72	1	3,204.72
Plant Ecologist	Sensitive Plant Species Survey	L. Hours	52.87	44.51	2,353.25	1	2,353.25
Plant Ecologist	Spec:management &	L. Hours	50.00	44.51	2,225.50	1	2,225.50
Entomologist	Fairy Shrimp surveys	L. Hours	24.98	44.51	1,111.86	1	1,111.86
Entomologist	Skipper surveys	L. Hours	12.00	44.51	534.12	1	534.12
Entomologist	Ant surveys	L. Hours	10.00	44.51	445.10	1	445.10
Herpetologist	Vernal Pool/Spadefoot monitor	L. Hours	19.98	44.51	889.31	1	889.31
Mammalogist	Wildlife Corridors	L. Hours	160.00	44.51	7,121.60	1	7,121.60
Ornithologist	CSS, Chap, and grassland	L. Hours	34.95	44.51	1,555.51	1	1,555.51
Ornithologist	Riparian	L. Hours	2.40	44.51	106.82	1	106.82
Ornithologist	LBV,WIFL nest monitoring	L. Hours	1.92	44.51	85.46	1	85.46
Ornithologist	Lagoons	L. Hours	362.08	44.51	16,116.18	1	16,116.18
Science Director	Planning and Review	Hours	25.00	50.73	1,268.25	1	1,268.25
Monitor Climate	Analyze data	L. Hours	8.33	44.51	370.92	1	370.92
Other	Adaptive management	Item	0.05	30,000.00	1,500.00	1	1,500.00
Sub-Total							41,273.00
HABITAT MAINTENANCE							
Erosion Control	Slope Stabilization	L. Hours	89.00	22.76	2,025.64	5	405.13
Seed Collection	Seed Banking	Accession	0.20	2,500.00	500.00	15	33.33
Plant Procurement	Rooted cuttings	Item	50.00	4.00	200.00	5	40.00
Exotic Plant Control	Supervision by botantist	L. Hours	15.00	44.51	667.65	1	667.65
Exotic Plant Control	Laborers (5)	L. Hours	445.00	22.76	10,128.20	1	10,128.20
Exotic Animal Control	Supervise cowbird removal	L. Hours	2.00	44.51	89.02	1	89.02
Exotic Animal Control	Cowbird Traps	Item	0.50	500.00	250.00	5	50.00
Sub-Total							11,413.33

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
PUBLIC SERVICES							
Patrolling	Supervising officer	L. Hours	89.00	35.19	3,131.91	1	3,131.91
Patrolling	4 rangers/ officers	L. Hours	356.00	32.08	11,420.48	1	11,420.48
Trail	Maintenance	Mile	3.40	4,000.00	13,600.00	5	2,720.00
Sign	Misc	Item	50.00	3.25	162.50	7	23.21
Sign	Boundary 8" X 13.5"	Item	203.25	5.25	1,067.06	10	106.71
Sign	Sign posts u-channel	Item	50.00	11.00	550.00	10	55.00
Sign, Redwood	Interpretive 4'X 6'	Item	2.50	1,000.00	2,500.00	15	166.67
Community Outreach	Public outreach coordinator	L. Hours	89.00	32.08	2,855.12	1	2,855.12
Sub-Total							20,479.10
GENERAL MAINTENANCE							
Hauling, Truck	Truckload of trash	Item	5.00	40.00	200.00	1	200.00
Sub-Total							200.00
REPORTING							
Database Management	Data analysis and reporting	L. Hours	76.90	44.51	3,422.82	1	3,422.82
GIS/CAD Management	Data Management	L. Hours	44.50	44.51	1,980.70	1	1,980.70
Annual Reports	Reporting coordination	L. Hours	12.50	44.51	556.38	1	556.38
Management Plan	Initial Report	L. Hours	10.00	44.51	445.10	3	148.37
Sub-Total							6,108.27
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	25.00	44.51	1,112.75	1	1,112.75
Preserve Office	Janitorial	Sq. Ft.	100.00	1.70	170.00	30	5.67
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	100.00	1.00	100.00	1	100.00
Telephone Charges, Annual	Cell Phone Charges 8 phones	Year	0.60	720.00	432.00	1	432.00
Office Supplies, Year	Supplies	Person	0.50	250.00	125.00	1	125.00
Furniture	Desk	Item	0.50	250.00	125.00	10	12.50
Furniture	Chair	Item	0.50	150.00	75.00	5	15.00
Furniture	Bookcase, 3'x5'	Item	0.10	150.00	15.00	8	1.88
Furniture	File cabinet	Item	0.25	400.00	100.00	10	10.00
Copier	Copier, 15-18 ppm	Item	0.05	2,500.00	125.00	8	15.63
Fax Machine	Standard	Item	0.05	250.00	12.50	5	2.50
Telephone	Touch-tone	Item	0.50	55.00	27.50	5	5.50
E-Mail	Services	Year	0.05	500.00	25.00	1	25.00
Computer, PC & Monitor	133 MHz Pentium	Item	0.50	2,100.00	1,050.00	4	262.50
Computer software	Microsoft Office Pkg	Item	0.40	450.00	180.00	4	45.00
Computer software	Consulting	Hour	0.05	1,500.00	75.00	1	75.00
Laser Printer	600 DPI	Item	0.10	840.00	84.00	4	21.00
Deskjet Printer	HP DeskJet 895	Item	0.15	499.00	74.85	6	12.48
Sub-Total							2,279.41

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
FIELD EQUIPMENT							
Vehicle	Toyota extra-cab 4X4	Item	0.45	24,000.00	10,800.00	8	1,350.00
Vehicle	Fuel (444 gallons/vehicle/year	Gallons	199.80	2.00	399.60	1	399.60
Vehicle	Maintenance	Year	0.05	5,000.00	250.00	1	250.00
Vehicle Insurance	Insurance (9 x $1,632/yr))	Year	0.05	14,688.80	734.44	1	734.44
Other	all supplies, see text	Item	0.05	13,870.59	693.53	1	693.53
Sub-Total							3,427.57
OPERATIONS							
Audit	CPA Audit	Acre	356.75	0.55	196.21	1	196.21
Insurance	Liability/Fee	Acres	356.75	0.37	132.00	1	132.00
Sub-Total							328.21
CONTINGENCY & ADMINISTRATION							
Contingency							9,062.86
Administration							23,925.95
Sub-Total							32,988.81
Total							123,617.39

Section 10 - Financial Summary

Property Title: Carlsbad Funding Analysis | Dataset: CA004 | PAR ID: RO61FIN | 05/05/2004

Phase Budget 004 Other public entities (420 ac.)

	Rate %	Total $
INITIAL FINANCIAL REQUIREMENTS		
I & C Revenue		0
I & C Management Costs		171,265
I & C Contingency Expense	10.00	17,127
Total I & C Management Costs		188,392
I & C Administrative Costs of Total I & C Management Costs	24.00	45,214
Total I & C Costs		233,607
Net I & C Management and Administrative Costs		233,607
ANNUAL ONGOING FINANCIAL REQUIREMENTS		
Ongoing Costs		90,628
Ongoing Contingency Expense	10.00	9,063
Total Ongoing Management Costs		99,692
Ongoing Administrative Costs of Total Ongoing Management costs	24.00	23,926
Total Ongoing Costs		123,618
ENDOWMENT REQUIREMENTS FOR ONGOING STEWARDSHIP		
Endowment to Provide Income of $123,618		2,747,067
Endowment per Acre is $6,541.		
Ongoing Management Costs Based on 4.50% of Endowment per Year.		
Ongoing Management Funding is $123,618 per Year Resulting in $294 per Acre per Year.		
TOTAL CONTRIBUTION		2,980,674

Appendix 6.

PAR for Private Landowners (HOA)

Section 8 = Initial and Capital Funds Required
Section 9 = Ongoing Funds Required
Section 10 = Cost Summary

Section 8 - Initial & Capital Tasks and Costs

Property Title: Carlsbad Funding Analysis Dataset: CA004 PAR ID: RO61FIN 05/05/2004

Budget: Phase Budget 005 Private

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
SITE CONSTRUCTION/MAINT.							
Fence, 4' X 6' X 6'	Post & 3/4" Cable	Lin. Ft.	5,829.12	12.00	69,949.44	1.0	69,949.44
Fence - Installed	Chain Link 6'	Lin. Ft.	2,914.56	9.85	28,708.42	1.0	28,708.42
Fence - Installed	Barbed-wire, 4 strd.	Lin. Ft.	17,487.36	2.45	42,844.03	1.0	42,844.03
Gate	16" arm swing	Item	12.00	2,500.00	30,000.00	1.0	30,000.00
Vehicle Barrier	Concrete Bollard	Lin. Ft	2,914.56	8.00	23,316.48	1.0	23,316.48
Sub-Total							194,818.37
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	50.00	44.51	2,225.50	1.0	2,225.50
Plant Ecologist	Vegetation Mapping	L. Hours	85.68	44.51	3,813.62	1.0	3,813.62
Plant Ecologist	Sensitive Plant Species Survey	L. Hours	53.77	44.51	2,393.13	1.0	2,393.13
Plant Ecologist	Monit. Enc Bacc & DM	L. Hours	15.20	44.51	676.55	1.0	676.55
Plant Ecologist	Spec:management &	L. Hours	50.00	44.51	2,225.50	1.0	2,225.50
Entomologist	Skipper surveys	L. Hours	15.00	44.51	667.65	1.0	667.65
Entomologist	Ant surveys	L. Hours	48.00	44.51	2,136.48	1.0	2,136.48
Herpetologist	Pit-array monitoring	L. Hours	48.00	44.51	2,136.48	1.0	2,136.48
Herpetologist	Pit-array installation/maint	L. Hours	12.00	32.08	384.96	1.0	384.96
Ornithologist	CSS, Chap, and grassland	L. Hours	329.09	44.51	14,647.69	1.0	14,647.69
Ornithologist	Riparian	L. Hours	55.20	44.51	2,456.95	1.0	2,456.95
Ornithologist	LBV,WIFL nest monitoring	L. Hours	30.72	44.51	1,367.35	1.0	1,367.35
Ornithologist	CAGN dispersal studies	L. Hours	240.00	44.51	10,682.40	1.0	10,682.40
Science Director	Planning and Review	Hours	120.00	50.73	6,087.60	1.0	6,087.60
Monitor Climate	Analyze data	L. Hours	8.33	44.51	370.92	1.0	370.92
Other	Adaptive management	Item	0.24	30,000.00	7,200.00	1.0	7,200.00
Sub-Total							59,472.78
HABITAT MAINTENANCE							
Erosion Control	Slope Stabilization	L. Hours	427.20	22.76	9,723.07	1.0	9,723.07
Seed Collection	Seed Banking	Accession	0.96	2,500.00	2,400.00	1.0	2,400.00
Plant Procurement	Rooted cuttings	Item	240.00	4.00	960.00	1.0	960.00
Exotic Plant Control	Supervision by botantist	L. Hours	72.00	44.51	3,204.72	1.0	3,204.72
Exotic Plant Control	Up-front control	Item	0.24	500,000.00	120,000.00	1.0	120,000.00
Exotic Animal Control	Supervise cowbird removal	L. Hours	9.60	44.51	427.30	1.0	427.30
Exotic Animal Control	Cowbird trap checks-labor	L. Hours	268.80	32.08	8,623.10	1.0	8,623.10
Exotic Animal Control	Cowbird Traps	Item	2.40	500.00	1,200.00	1.0	1,200.00
Sub-Total							146,538.19

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
PUBLIC SERVICES							
Patrolling	Supervising officer	L. Hours	427.20	35.19	15,033.17	1.0	15,033.17
Patrolling	4 rangers/ officers	L. Hours	1,708.80	32.08	54,818.30	1.0	54,818.30
Trail	Maintenance	Mile	16.32	4,000.00	65,280.00	1.0	65,280.00
Sign	Misc	Item	240.00	3.25	780.00	1.0	780.00
Sign	Boundary 8" X 13.5"	Item	975.60	5.25	5,121.90	1.0	5,121.90
Sign	Sign posts u-channel	Item	240.00	11.00	2,640.00	1.0	2,640.00
Sign, Redwood	Interpretive 4'X 6'	Item	12.00	1,000.00	12,000.00	1.0	12,000.00
Community Outreach	Public outreach coordinator	L. Hours	427.20	32.08	13,704.58	1.0	13,704.58
Sub-Total							169,377.95
GENERAL MAINTENANCE							
Hauling, Truck	Truckload of trash	Item	24.00	40.00	960.00	1.0	960.00
Sub-Total							960.00
REPORTING							
Database Management	Data analysis and reporting	L. Hours	369.12	44.51	16,429.53	1.0	16,429.53
GIS/CAD Management	Data Management	L. Hours	213.60	44.51	9,507.34	1.0	9,507.34
Annual Reports	Reporting coordination	L. Hours	60.00	44.51	2,670.60	1.0	2,670.60
Management Plan	Initial Report	L. Hours	48.00	44.51	2,136.48	1.0	2,136.48
Sub-Total							30,743.95
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	120.00	44.51	5,341.20	1.0	5,341.20
Preserve Office	Janitorial	Sq. Ft.	480.00	1.70	816.00	1.0	816.00
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	480.00	1.00	480.00	1.0	480.00
Telephone Charges, Annual	Cell Phone Charges 8 phones	Year	2.88	720.00	2,073.60	1.0	2,073.60
Office Supplies, Year	Supplies	Person	2.40	250.00	600.00	1.0	600.00
Furniture	Desk	Item	2.40	250.00	600.00	1.0	600.00
Furniture	Chair	Item	2.40	150.00	360.00	1.0	360.00
Furniture	Bookcase, 3'x5'	Item	0.48	150.00	72.00	1.0	72.00
Furniture	File cabinet	Item	1.20	400.00	480.00	1.0	480.00
Copier	Copier, 15-18 ppm	Item	0.24	2,500.00	600.00	1.0	600.00
Fax Machine	Standard	Item	0.24	250.00	60.00	1.0	60.00
Telephone	Touch-tone	Item	2.40	55.00	132.00	1.0	132.00
E-Mail	Services	Year	0.24	500.00	120.00	1.0	120.00
Computer, PC & Monitor	133 MHz Pentium	Item	2.40	2,100.00	5,040.00	1.0	5,040.00
Computer software	Microsoft Office Pkg	Item	1.92	450.00	864.00	1.0	864.00
Computer software	Consulting	Hour	0.24	1,500.00	360.00	1.0	360.00
Laser Printer	600 DPI	Item	0.48	840.00	403.20	1.0	403.20
Deskjet Printer	HP DeskJet 895	Item	0.72	499.00	359.28	1.0	359.28
Sub-Total							18,761.28

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
FIELD EQUIPMENT							
Vehicle	Toyota extra-cab 4X4	Item	2.16	24,000.00	51,840.00	1.0	51,840.00
Vehicle	Fuel (444 gallons/vehicle/year	Gallons	959.04	2.00	1,918.08	1.0	1,918.08
Vehicle	Maintenance	Year	0.24	5,000.00	1,200.00	1.0	1,200.00
Vehicle Insurance	Insurance (9 x $1,632/yr))	Year	0.24	14,688.80	3,525.31	1.0	3,525.31
Other	all supplies 1st yr, see text	Item	0.24	34,495.70	8,278.97	1.0	8,278.97
Sub-Total							66,762.36
OPERATIONS							
Audit	CPA Audit	Acre	1,712.40	0.55	941.82	1.0	941.82
Insurance	Liability/Fee	Acres	1,712.40	0.37	633.59	1.0	633.59
Sub-Total							1,575.41
CONTINGENCY & ADMINISTRATION							
Contingency							68,901.03
Administration							181,898.72
Sub-Total							250,799.75
Total							939,810.04

Section 9 - Ongoing Tasks and Costs

Property Title: Carlsbad Funding Analysis Dataset: CA004 PAR ID: RO61FIN 05/05/2004

Budget: Phase Budget 005 Private

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
SITE CONSTRUCTION/MAINT.							
Fence, 4' X 6' X 6'	Post & 3/4" Cable	Lin. Ft.	5,829.12	12.00	69,949.44	25	2,797.98
Fence, 4' X 6' X 6'	Post & 3/4" Cable Maintenance	Lin. Ft.	582.91	12.00	6,994.92	1	6,994.92
Fence - Installed	Chain Link 6'	Lin. Ft.	2,914.56	9.85	28,708.42	25	1,148.34
Fence - Installed	Chain Link 6' Mainenance	Lin. Ft.	291.46	9.85	2,870.88	1	2,870.88
Fence - Installed	Barbed-wire, 4 strd.	Lin. Ft.	17,487.36	2.45	42,844.03	25	1,713.76
Fence - Installed	Barbed-wire, 4 strd.Maintain	Lin. Ft.	1,748.74	2.45	4,284.41	1	4,284.41
Gate	16" arm swing	Item	12.00	2,500.00	30,000.00	20	1,500.00
Vehicle Barrier	Concrete Bollard	Lin. Ft	2,914.56	8.00	23,316.48	25	932.66
Vehicle Barrier	Concrete Bollard maintain	Lin. Ft	291.46	8.00	2,331.68	1	2,331.68
Sub-Total							24,574.63
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	50.00	44.51	2,225.50	1	2,225.50
Plant Ecologist	Vegetation Mapping	L. Hours	85.68	44.51	3,813.62	5	762.72
Plant Ecologist	Sensitive Plant Species Survey	L. Hours	53.77	44.51	2,393.13	1	2,393.13
Plant Ecologist	Monit. Enc Bacc & DM	L. Hours	15.20	44.51	676.55	5	135.31
Plant Ecologist	Spec:management &	L. Hours	50.00	44.51	2,225.50	1	2,225.50
Entomologist	Skipper surveys	L. Hours	15.00	44.51	667.65	1	667.65
Entomologist	Ant surveys	L. Hours	48.00	44.51	2,136.48	1	2,136.48
Herpetologist	Pit-array monitoring	L. Hours	48.00	44.51	2,136.48	2	1,068.24
Herpetologist	Pit-array installation/maint	L. Hours	12.00	32.08	384.96	3	128.32
Ornithologist	CSS, Chap, and grassland	L. Hours	329.09	44.51	14,647.69	1	14,647.69
Ornithologist	Riparian	L. Hours	55.20	44.51	2,456.95	1	2,456.95
Ornithologist	LBV,WIFL nest monitoring	L. Hours	30.72	44.51	1,367.35	1	1,367.35
Ornithologist	CAGN dispersal studies	L. Hours	240.00	44.51	10,682.40	6	1,780.40
Science Director	Planning and Review	Hours	120.00	50.73	6,087.60	1	6,087.60
Monitor Climate	Analyze data	L. Hours	8.33	44.51	370.92	1	370.92
Other	Adaptive management	Item	0.24	30,000.00	7,200.00	1	7,200.00
Sub-Total							45,653.76
HABITAT MAINTENANCE							
Erosion Control	Slope Stabilization	L. Hours	427.20	22.76	9,723.07	5	1,944.61
Seed Collection	Seed Banking	Accession	0.96	2,500.00	2,400.00	15	160.00
Plant Procurement	Rooted cuttings	Item	240.00	4.00	960.00	5	192.00
Exotic Plant Control	Supervision by botantist	L. Hours	72.00	44.51	3,204.72	1	3,204.72
Exotic Plant Control	Laborers (5)	L. Hours	2,136.00	22.76	48,615.36	1	48,615.36
Exotic Animal Control	Supervise cowbird removal	L. Hours	9.60	44.51	427.30	1	427.30
Exotic Animal Control	Cowbird trap checks-labor	L. Hours	268.80	32.08	8,623.10	1	8,623.10
Exotic Animal Control	Cowbird Traps	Item	2.40	500.00	1,200.00	5	240.00
Sub-Total							63,407.09

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
PUBLIC SERVICES							
Patrolling	Supervising officer	L. Hours	427.20	35.19	15,033.17	1	15,033.17
Patrolling	4 rangers/ officers	L. Hours	1,708.80	32.08	54,818.30	1	54,818.30
Trail	Maintenance	Mile	16.32	4,000.00	65,280.00	5	13,056.00
Sign	Misc	Item	240.00	3.25	780.00	7	111.43
Sign	Boundary 8" X 13.5"	Item	975.60	5.25	5,121.90	10	512.19
Sign	Sign posts u-channel	Item	240.00	11.00	2,640.00	10	264.00
Sign, Redwood	Interpretive 4'X 6'	Item	12.00	1,000.00	12,000.00	15	800.00
Community Outreach	Public outreach coordinator	L. Hours	427.20	32.08	13,704.58	1	13,704.58
Sub-Total							98,299.67
GENERAL MAINTENANCE							
Hauling, Truck	Truckload of trash	Item	24.00	40.00	960.00	1	960.00
Sub-Total							960.00
REPORTING							
Database Management	Data analysis and reporting	L. Hours	369.12	44.51	16,429.53	1	16,429.53
GIS/CAD Management	Data Management	L. Hours	213.60	44.51	9,507.34	1	9,507.34
Annual Reports	Reporting coordination	L. Hours	60.00	44.51	2,670.60	1	2,670.60
Management Plan	Initial Report	L. Hours	48.00	44.51	2,136.48	3	712.16
Sub-Total							29,319.63
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	120.00	44.51	5,341.20	1	5,341.20
Preserve Office	Janitorial	Sq. Ft.	480.00	1.70	816.00	30	27.20
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	480.00	1.00	480.00	1	480.00
Telephone Charges, Annual	Cell Phone Charges 8 phones	Year	2.88	720.00	2,073.60	1	2,073.60
Office Supplies, Year	Supplies	Person	2.40	250.00	600.00	1	600.00
Furniture	Desk	Item	2.40	250.00	600.00	10	60.00
Furniture	Chair	Item	2.40	150.00	360.00	5	72.00
Furniture	Bookcase, 3'x5'	Item	0.48	150.00	72.00	8	9.00
Furniture	File cabinet	Item	1.20	400.00	480.00	10	48.00
Copier	Copier, 15-18 ppm	Item	0.24	2,500.00	600.00	8	75.00
Fax Machine	Standard	Item	0.24	250.00	60.00	5	12.00
Telephone	Touch-tone	Item	2.40	55.00	132.00	5	26.40
E-Mail	Services	Year	0.24	500.00	120.00	1	120.00
Computer, PC & Monitor	133 MHz Pentium	Item	2.40	2,100.00	5,040.00	4	1,260.00
Computer software	Microsoft Office Pkg	Item	1.92	450.00	864.00	4	216.00
Computer software	Consulting	Hour	0.24	1,500.00	360.00	1	360.00
Laser Printer	600 DPI	Item	0.48	840.00	403.20	4	100.80
Deskjet Printer	HP DeskJet 895	Item	0.72	499.00	359.28	6	59.88
Sub-Total							10,941.08

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
FIELD EQUIPMENT							
Vehicle	Toyota extra-cab 4X4	Item	2.16	24,000.00	51,840.00	8	6,480.00
Vehicle	Fuel (444 gallons/vehicle/year	Gallons	959.04	2.00	1,918.08	1	1,918.08
Vehicle	Maintenance	Year	0.24	5,000.00	1,200.00	1	1,200.00
Vehicle Insurance	Insurance (9 x $1,632/yr))	Year	0.24	14,688.80	3,525.31	1	3,525.31
Other	all supplies, see text	Item	0.24	13,870.59	3,328.94	1	3,328.94
Sub-Total							16,452.33
OPERATIONS							
Audit	CPA Audit	Acre	1,712.40	0.55	941.82	1	941.82
Insurance	Liability/Fee	Acres	1,712.40	0.37	633.59	1	633.59
Sub-Total							1,575.41
CONTINGENCY & ADMINISTRATION							
Contingency							29,118.36
Administration							76,872.47
Sub-Total							105,990.83
Total							397,174.43

Section 10 - Financial Summary

Property Title: Carlsbad Funding Analysis | Dataset: CA004 | PAR ID: RO61FIN | 05/05/2004

Phase Budget 005 Private (1713 ac.)

	Rate %	Total $
INITIAL FINANCIAL REQUIREMENTS		
I & C Revenue		0
I & C Management Costs		689,010
I & C Contingency Expense	10.00	68,901
Total I & C Management Costs		757,911
I & C Administrative Costs of Total I & C Management Costs	24.00	181,899
Total I & C Costs		939,810
Net I & C Management and Administrative Costs		939,810
ANNUAL ONGOING FINANCIAL REQUIREMENTS		
Ongoing Costs		291,183
Ongoing Contingency Expense	10.00	29,118
Total Ongoing Management Costs		320,302
Ongoing Administrative Costs of Total Ongoing Management costs	24.00	76,872
Total Ongoing Costs		397,174
ENDOWMENT REQUIREMENTS FOR ONGOING STEWARDSHIP		
Endowment to Provide Income of $397,174		8,826,089
Endowment per Acre is $5,152.		
Ongoing Management Costs Based on 4.50% of Endowment per Year.		
Ongoing Management Funding is $397,174 per Year Resulting in $232 per Acre per Year.		
TOTAL CONTRIBUTION		9,765,899

Appendix 7.

PAR for Wildlife Agencies (CDFG)

Section 8 = Initial and Capital Funds Required
Section 9 = Ongoing Funds Required
Section 10 = Cost Summary

Section 8 - Initial & Capital Tasks and Costs

Property Title: Carlsbad Funding Analysis | Dataset: CA004 | PAR ID: RO61FIN | 05/05/2004

Budget: Phase Budget 006 Wildlife Agency

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
SITE CONSTRUCTION/MAINT.							
Fence, 4' X 6' X 6'	Post & 3/4" Cable	Lin. Ft.	4,371.84	12.00	52,462.08	1.0	52,462.08
Fence - Installed	Chain Link 6'	Lin. Ft.	2,185.92	9.85	21,531.31	1.0	21,531.31
Fence - Installed	Barbed-wire, 4 strd.	Lin. Ft.	13,115.52	2.45	32,133.02	1.0	32,133.02
Gate	16" arm swing	Item	9.00	2,500.00	22,500.00	1.0	22,500.00
Vehicle Barrier	Concrete Bollard	Lin. Ft	2,185.92	8.00	17,487.36	1.0	17,487.36
Sub-Total							146,113.77
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	50.00	44.51	2,225.50	1.0	2,225.50
Plant Ecologist	Vegetation Mapping	L. Hours	64.26	44.51	2,860.21	1.0	2,860.21
Plant Ecologist	Sensitive Plant Species Survey	L. Hours	68.10	44.51	3,031.30	1.0	3,031.30
Plant Ecologist	Monit. Enc Bacc & DM	L. Hours	0.80	44.51	35.61	1.0	35.61
Plant Ecologist	Spec:management &	L. Hours	50.00	44.51	2,225.50	1.0	2,225.50
Entomologist	Skipper surveys	L. Hours	78.00	44.51	3,471.78	1.0	3,471.78
Entomologist	Ant surveys	L. Hours	36.00	44.51	1,602.36	1.0	1,602.36
Herpetologist	Pit-array monitoring	L. Hours	81.60	44.51	3,632.02	1.0	3,632.02
Herpetologist	Pit-array installation/maint	L. Hours	20.40	32.08	654.43	1.0	654.43
Ornithologist	CSS, Chap, and grassland	L. Hours	112.12	44.51	4,990.59	1.0	4,990.59
Ornithologist	Riparian	L. Hours	43.20	44.51	1,922.83	1.0	1,922.83
Ornithologist	LBV,WIFL nest monitoring	L. Hours	21.12	44.51	940.05	1.0	940.05
Ornithologist	Lagoons	L. Hours	805.92	44.51	35,871.50	1.0	35,871.50
Ornithologist	CAGN dispersal studies	L. Hours	408.00	44.51	18,160.08	1.0	18,160.08
Science Director	Planning and Review	Hours	90.00	50.73	4,565.70	1.0	4,565.70
Monitor Climate	Analyze data	L. Hours	8.33	44.51	370.92	1.0	370.92
Other	Adaptive management	Item	0.18	30,000.00	5,400.00	1.0	5,400.00
Sub-Total							91,960.38
HABITAT MAINTENANCE							
Erosion Control	Slope Stabilization	L. Hours	320.40	22.76	7,292.30	1.0	7,292.30
Seed Collection	Seed Banking	Accession	0.72	2,500.00	1,800.00	1.0	1,800.00
Plant Procurement	Rooted cuttings	Item	180.00	4.00	720.00	1.0	720.00
Exotic Plant Control	Supervision by botantist	L. Hours	54.00	44.51	2,403.54	1.0	2,403.54
Exotic Plant Control	Up-front control	Item	0.18	500,000.00	90,000.00	1.0	90,000.00
Exotic Animal Control	Supervise cowbird removal	L. Hours	7.20	44.51	320.47	1.0	320.47
Exotic Animal Control	Cowbird trap checks-labor	L. Hours	190.40	32.08	6,108.03	1.0	6,108.03
Exotic Animal Control	Cowbird Traps	Item	1.80	500.00	900.00	1.0	900.00
Sub-Total							109,544.34

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
PUBLIC SERVICES							
Patrolling	Supervising officer	L. Hours	320.40	35.19	11,274.88	1.0	11,274.88
Patrolling	4 rangers/ officers	L. Hours	1,281.60	32.08	41,113.73	1.0	41,113.73
Trail	Maintenance	Mile	12.24	4,000.00	48,960.00	1.0	48,960.00
Sign	Misc	Item	180.00	3.25	585.00	1.0	585.00
Sign	Boundary 8" X 13.5"	Item	731.70	5.25	3,841.43	1.0	3,841.43
Sign	Sign posts u-channel	Item	180.00	11.00	1,980.00	1.0	1,980.00
Sign, Redwood	Interpretive 4'X 6'	Item	9.00	1,000.00	9,000.00	1.0	9,000.00
Community Outreach	Public outreach coordinator	L. Hours	320.40	32.08	10,278.43	1.0	10,278.43
Sub-Total							127,033.47
GENERAL MAINTENANCE							
Hauling, Truck	Truckload of trash	Item	18.00	40.00	720.00	1.0	720.00
Sub-Total							720.00
REPORTING							
Database Management	Data analysis and reporting	L. Hours	276.84	44.51	12,322.15	1.0	12,322.15
GIS/CAD Management	Data Management	L. Hours	160.20	44.51	7,130.50	1.0	7,130.50
Annual Reports	Reporting coordination	L. Hours	45.00	44.51	2,002.95	1.0	2,002.95
Management Plan	Initial Report	L. Hours	36.00	44.51	1,602.36	1.0	1,602.36
Sub-Total							23,057.96
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	90.00	44.51	4,005.90	1.0	4,005.90
Preserve Office	Janitorial	Sq. Ft.	360.00	1.70	612.00	1.0	612.00
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	360.00	1.00	360.00	1.0	360.00
Telephone Charges, Annual	Cell Phone Charges 8 phones	Year	2.16	720.00	1,555.20	1.0	1,555.20
Office Supplies, Year	Supplies	Person	1.80	250.00	450.00	1.0	450.00
Furniture	Desk	Item	1.80	250.00	450.00	1.0	450.00
Furniture	Chair	Item	1.80	150.00	270.00	1.0	270.00
Furniture	Bookcase, 3'x5'	Item	0.36	150.00	54.00	1.0	54.00
Furniture	File cabinet	Item	0.90	400.00	360.00	1.0	360.00
Copier	Copier, 15-18 ppm	Item	0.18	2,500.00	450.00	1.0	450.00
Fax Machine	Standard	Item	0.18	250.00	45.00	1.0	45.00
Telephone	Touch-tone	Item	1.80	55.00	99.00	1.0	99.00
E-Mail	Services	Year	0.18	500.00	90.00	1.0	90.00
Computer, PC & Monitor	133 MHz Pentium	Item	1.80	2,100.00	3,780.00	1.0	3,780.00
Computer software	Microsoft Office Pkg	Item	1.44	450.00	648.00	1.0	648.00
Computer software	Consulting	Hour	0.18	1,500.00	270.00	1.0	270.00
Laser Printer	600 DPI	Item	0.36	840.00	302.40	1.0	302.40
Deskjet Printer	HP DeskJet 895	Item	0.54	499.00	269.46	1.0	269.46
Sub-Total							14,070.96

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Times Years	Total Cost
FIELD EQUIPMENT							
Vehicle	Toyota extra-cab 4X4	Item	1.62	24,000.00	38,880.00	1.0	38,880.00
Vehicle	Fuel (444 gallons/vehicle/year	Gallons	719.28	2.00	1,438.56	1.0	1,438.56
Vehicle	Maintenance	Year	0.18	5,000.00	900.00	1.0	900.00
Vehicle Insurance	Insurance (9 x $1,632/yr))	Year	0.18	14,688.80	2,643.98	1.0	2,643.98
Other	all supplies 1st yr, see text	Item	0.18	34,495.70	6,209.23	1.0	6,209.23
Sub-Total							50,071.77
OPERATIONS							
Audit	CPA Audit	Acre	1,284.30	0.55	706.37	1.0	706.37
Insurance	Liability/Fee	Acres	1,284.30	0.37	475.19	1.0	475.19
Sub-Total							1,181.56
CONTINGENCY & ADMINISTRATION							
Contingency							56,375.42
Administration							148,831.11
Sub-Total							205,206.53
Total							768,960.74

Section 9 - Ongoing Tasks and Costs

Property Title: Carlsbad Funding Analysis Dataset: CA004 PAR ID: RO61FIN 05/05/2004

Budget: Phase Budget 006 Wildlife Agency

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
SITE CONSTRUCTION/MAINT.							
Fence, 4' X 6' X 6'	Post & 3/4" Cable	Lin. Ft.	4,371.84	12.00	52,462.08	25	2,098.48
Fence, 4' X 6' X 6'	Post & 3/4" Cable Maintenance	Lin. Ft.	437.18	12.00	5,246.16	1	5,246.16
Fence - Installed	Chain Link 6'	Lin. Ft.	2,185.92	9.85	21,531.31	25	861.25
Fence - Installed	Chain Link 6' Mainenance	Lin. Ft.	218.59	9.85	2,153.11	1	2,153.11
Fence - Installed	Barbed-wire, 4 strd.	Lin. Ft.	13,115.52	2.45	32,133.02	25	1,285.32
Fence - Installed	Barbed-wire, 4 strd.Maintain	Lin. Ft.	1,311.55	2.45	3,213.30	1	3,213.30
Gate	16" arm swing	Item	9.00	2,500.00	22,500.00	20	1,125.00
Vehicle Barrier	Concrete Bollard	Lin. Ft	2,185.92	8.00	17,487.36	25	699.49
Vehicle Barrier	Concrete Bollard maintain	Lin. Ft	218.59	8.00	1,748.72	1	1,748.72
Sub-Total							18,430.83
BIOTIC SURVEYS							
Project Management	Supervise/coordinate	L. Hours	50.00	44.51	2,225.50	1	2,225.50
Plant Ecologist	Vegetation Mapping	L. Hours	64.26	44.51	2,860.21	5	572.04
Plant Ecologist	Sensitive Plant Species Survey	L. Hours	68.10	44.51	3,031.30	1	3,031.30
Plant Ecologist	Monit. Enc Bacc & DM	L. Hours	0.80	44.51	35.61	5	7.12
Plant Ecologist	Spec:management &	L. Hours	50.00	44.51	2,225.50	1	2,225.50
Entomologist	Skipper surveys	L. Hours	78.00	44.51	3,471.78	1	3,471.78
Entomologist	Ant surveys	L. Hours	36.00	44.51	1,602.36	1	1,602.36
Herpetologist	Pit-array monitoring	L. Hours	81.60	44.51	3,632.02	2	1,816.01
Herpetologist	Pit-array installation/maint	L. Hours	20.40	32.08	654.43	3	218.14
Ornithologist	CSS, Chap, and grassland	L. Hours	112.12	44.51	4,990.59	1	4,990.59
Ornithologist	Riparian	L. Hours	43.20	44.51	1,922.83	1	1,922.83
Ornithologist	LBV,WIFL nest monitoring	L. Hours	21.12	44.51	940.05	1	940.05
Ornithologist	Lagoons	L. Hours	805.92	44.51	35,871.50	1	35,871.50
Ornithologist	CAGN dispersal studies	L. Hours	408.00	44.51	18,160.08	6	3,026.68
Science Director	Planning and Review	Hours	90.00	50.73	4,565.70	1	4,565.70
Monitor Climate	Analyze data	L. Hours	8.33	44.51	370.92	1	370.92
Other	Adaptive management	Item	0.18	30,000.00	5,400.00	1	5,400.00
Sub-Total							72,258.02
HABITAT MAINTENANCE							
Erosion Control	Slope Stabilization	L. Hours	320.40	22.76	7,292.30	5	1,458.46
Seed Collection	Seed Banking	Accession	0.72	2,500.00	1,800.00	15	120.00
Plant Procurement	Rooted cuttings	Item	180.00	4.00	720.00	5	144.00
Exotic Plant Control	Supervision by botantist	L. Hours	54.00	44.51	2,403.54	1	2,403.54
Exotic Plant Control	Laborers (5)	L. Hours	1,602.00	22.76	36,461.52	1	36,461.52
Exotic Animal Control	Supervise cowbird removal	L. Hours	7.20	44.51	320.47	1	320.47
Exotic Animal Control	Cowbird trap checks-labor	L. Hours	190.40	32.08	6,108.03	1	6,108.03
Exotic Animal Control	Cowbird Traps	Item	1.80	500.00	900.00	5	180.00
Sub-Total							47,196.02

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
PUBLIC SERVICES							
Patrolling	Supervising officer	L. Hours	320.40	35.19	11,274.88	1	11,274.88
Patrolling	4 rangers/ officers	L. Hours	1,281.60	32.08	41,113.73	1	41,113.73
Trail	Maintenance	Mile	12.24	4,000.00	48,960.00	5	9,792.00
Sign	Misc	Item	180.00	3.25	585.00	7	83.57
Sign	Boundary 8" X 13.5"	Item	731.70	5.25	3,841.43	10	384.14
Sign	Sign posts u-channel	Item	180.00	11.00	1,980.00	10	198.00
Sign, Redwood	Interpretive 4'X 6'	Item	9.00	1,000.00	9,000.00	15	600.00
Community Outreach	Public outreach coordinator	L. Hours	320.40	32.08	10,278.43	1	10,278.43
Sub-Total							73,724.75
GENERAL MAINTENANCE							
Hauling, Truck	Truckload of trash	Item	18.00	40.00	720.00	1	720.00
Sub-Total							720.00
REPORTING							
Database Management	Data analysis and reporting	L. Hours	276.84	44.51	12,322.15	1	12,322.15
GIS/CAD Management	Data Management	L. Hours	160.20	44.51	7,130.50	1	7,130.50
Annual Reports	Reporting coordination	L. Hours	45.00	44.51	2,002.95	1	2,002.95
Management Plan	Initial Report	L. Hours	36.00	44.51	1,602.36	3	534.12
Sub-Total							21,989.72
OFFICE MAINTENANCE							
Administrative	Operations	L. Hours	90.00	44.51	4,005.90	1	4,005.90
Preserve Office	Janitorial	Sq. Ft.	360.00	1.70	612.00	30	20.40
Utilities, Annual	Elec., Gas, Water	Sq. Ft.	360.00	1.00	360.00	1	360.00
Telephone Charges, Annual	Cell Phone Charges 8 phones	Year	2.16	720.00	1,555.20	1	1,555.20
Office Supplies, Year	Supplies	Person	1.80	250.00	450.00	1	450.00
Furniture	Desk	Item	1.80	250.00	450.00	10	45.00
Furniture	Chair	Item	1.80	150.00	270.00	5	54.00
Furniture	Bookcase, 3'x5'	Item	0.36	150.00	54.00	8	6.75
Furniture	File cabinet	Item	0.90	400.00	360.00	10	36.00
Copier	Copier, 15-18 ppm	Item	0.18	2,500.00	450.00	8	56.25
Fax Machine	Standard	Item	0.18	250.00	45.00	5	9.00
Telephone	Touch-tone	Item	1.80	55.00	99.00	5	19.80
E-Mail	Services	Year	0.18	500.00	90.00	1	90.00
Computer, PC & Monitor	133 MHz Pentium	Item	1.80	2,100.00	3,780.00	4	945.00
Computer software	Microsoft Office Pkg	Item	1.44	450.00	648.00	4	162.00
Computer software	Consulting	Hour	0.18	1,500.00	270.00	1	270.00
Laser Printer	600 DPI	Item	0.36	840.00	302.40	4	75.60
Deskjet Printer	HP DeskJet 895	Item	0.54	499.00	269.46	6	44.91
Sub-Total							8,205.81

Task list	Specificaton	Unit	Number of Units	Cost / Unit	Annual Cost	Divide Years	Total Cost
FIELD EQUIPMENT							
Vehicle	Toyota extra-cab 4X4	Item	1.62	24,000.00	38,880.00	8	4,860.00
Vehicle	Fuel (444 gallons/vehicle/year	Gallons	719.28	2.00	1,438.56	1	1,438.56
Vehicle	Maintenance	Year	0.18	5,000.00	900.00	1	900.00
Vehicle Insurance	Insurance (9 x $1,632/yr))	Year	0.18	14,688.80	2,643.98	1	2,643.98
Other	all supplies, see text	Item	0.18	13,870.59	2,496.71	1	2,496.71
Sub-Total							12,339.25
OPERATIONS							
Audit	CPA Audit	Acre	1,284.30	0.55	706.37	1	706.37
Insurance	Liability/Fee	Acres	1,284.30	0.37	475.19	1	475.19
Sub-Total							1,181.56
CONTINGENCY & ADMINISTRATION							
Contingency							25,604.60
Administration							67,596.13
Sub-Total							93,200.73
Total							349,246.69

Section 10 - Financial Summary

Property Title: Carlsbad Funding Analysis | Dataset: CA004 | PAR ID: RO61FIN | 05/05/2004

Phase Budget 006 Wildlife Agency (1253 ac.)

	Rate %	Total $
INITIAL FINANCIAL REQUIREMENTS		
I & C Revenue		0
I & C Management Costs		563,754
I & C Contingency Expense	10.00	56,375
Total I & C Management Costs		620,129
I & C Administrative Costs of Total I & C Management Costs	24.00	148,831
Total I & C Costs		768,960
Net I & C Management and Administrative Costs		768,960
ANNUAL ONGOING FINANCIAL REQUIREMENTS		
Ongoing Costs		256,045
Ongoing Contingency Expense	10.00	25,605
Total Ongoing Management Costs		281,651
Ongoing Administrative Costs of Total Ongoing Management costs	24.00	67,596
Total Ongoing Costs		349,247
ENDOWMENT REQUIREMENTS FOR ONGOING STEWARDSHIP		
Endowment to Provide Income of $349,247		7,761,044
Endowment per Acre is $6,194.		
Ongoing Management Costs Based on 4.50% of Endowment per Year.		
Ongoing Management Funding is $349,247 per Year Resulting in $279 per Acre per Year.		
TOTAL CONTRIBUTION		8,530,004