

CLARK COUNTY DESERT CONSERVATION PROGRAM

MULTIPLE SPECIES HABITAT CONSERVATION PLAN



2009-2011 IMPLEMENTATION PLAN AND BUDGET





**Clark County Desert Conservation Program
Multiple Species Habitat Conservation Plan
Proposed 2009-2011 Implementation Plan and Budget Report**

This Report describes the process followed to develop the 2009-2011 Implementation Plan and Budget for the Clark County Multiple Species Habitat Conservation Plan (MSHCP) and the outcome of the budget deliberations.

There are several sections to this report including:

- Description of the budget process described by the MSHCP
- Description of the project concept request, review and evaluation process
- Proposed 2009-2011 budget
- Results of the permittees' ranking process
- Summary of discussions among the permittees
- Proposed 2009-2011 Implementation Plan and Budget
- Comparison of 2009-2011 Implementation Plan & Budget using science advisor rankings
- Summary of the comments received on the proposed 2009-2011 Implementation Plan and Budget

MSHCP Implementation Plan and Budget Process & 2009-2011 Process

Guidance for the development of biennial implementation plans and budgets can be found in Section 2.1.12 of the MSHCP. Generally, it prescribes key provisions of the budget development process. These key provisions include:

- Adaptive Management Program recommendations and calculating available funding
- Ensuring biennium proposals are developed
- Holding budget sessions
- Submittal of Implementation Plan and Budget
- U.S. Fish and Wildlife Service review of implementation plan and budget
- Biennial calendar, which outlines explicit steps, dates, and responsible parties.

This Section of the MSHCP has consistently been used as a guide for Clark County and the permittees, Implementing Agencies and U.S. Fish and Wildlife Service (USFWS) when developing a budget process. Since inception of the MSHCP, the prescriptive calendar and budget process outlined in Section 2.1.12 have served as general guidance to the parties along with recommendations from the Adaptive Management Program, advisory committees and a Program Management Analysis (Kirchoff 2005). Necessary adjustments have been made to arrive at implementation plans and budgets, all of which have been approved by the U.S. Fish and Wildlife Service.

As Plan Administrator, Clark County has identified the budget process as an area of the MSHCP requiring significant revision. Clark County has notified the USFWS of its intent to pursue a major amendment to the MSHCP. In the short-term, and in order to continue to mitigate for incidental take in good faith, Clark County has proposed a budget process responsive to the key provisions outlined in the MSHCP in developing the 2009-2011 Implementation Plan and Budget, while actively pursuing a major amendment to the MSHCP.

Description of the Request for Project Concepts, Review and Evaluation Process

On February 11, 2008, Clark County, as Plan Administrator, hosted a conference call from 2:00 p.m. to 3:00 p.m. among the Implementing Agencies to discuss the proposed budget process, solicit input and make adjustments. Participants included Clark County (Marci Henson, Sue Wainscott, and John Tennert), City of North Las Vegas (Jan Schweitzer), City of Las Vegas (Cheng Shih), Nevada Department of Transportation

(Julie Ervin-Holoubek), and Nevada Department of Forestry (John Jones). The other signatories to the Implementation Agreement did not elect to participate. No objections were stated and no major revisions to the proposed process were requested (see Attachment 1). As Plan Administrator, Clark County is responsible preparing permit condition and explicit MSHCP required project concepts. The Implementing Agencies were asked to submit their top three (3) non-permit condition, non-MSHCP explicit project concepts.

On February 28, 2008, Clark County hosted a meeting between the Implementing Agencies and the Science Advisor (Desert Research Institute (DRI)) to develop project evaluation criteria from all meeting participants, to separate scientific from non-scientific criteria and to group major categories of criteria, if useful. For a full summary of this meeting and its results, see DRI's Decision Support System Results Report (Attachment 2).

On March 3, 2008, Clark County issued a request for non-permit condition project concepts via e-mail to all of the Implementing Agencies (see Attachment 3).

On March 28, 2008, Clark County received seven (7) project concepts in response to the request for non-permit condition or MSHCP explicit project concepts and forwarded the concepts to DRI for its review and ranking (See Attachment 4).

On March 23, 2008, Clark County sent draft review and ranking criteria to the permittee representatives (Erik Peters, Cheng Shih, John Willis, Catherine Lorbeer, Paul Andricopulos, Michael Johnson, Brok Armontrout, Julie Ervin-Holoubek, and Jan Schweitzer) for their consideration and requested feedback and comment in advance of the May 7, 2008 permittees meeting.

Clark County received no objection to the proposed review and ranking criteria. The permittees met on May 7, 2008 and finalized the review and ranking criteria. Upon consensus of the criteria (see Attachment 5), the seven (7) project concepts were distributed to the permittees for evaluation.

On May 16, 2008, the permittees were provided with DRI's Decision Support System Results Report (Attachment 2) and were asked to review the report and to take its findings into consideration when evaluating and ranking the project concepts. The permittees reviewed and evaluated the concepts independently.

During the week of May 26th, 2008, permittees submitted project concept scores to Clark County. The City of Boulder City did not participate.

The permittees met on June 4, 2008 to review and validate the results of the rankings and to develop a proposed overall budget and implementation plan for the 2009-2011 Implementation Plan and Budget.

Proposed 2009-2011 Budget

As Plan Administrator, Clark County reviewed the recommendations and guidance of the 2006 Desert Conservation Program Advisory Committee (DCP-AC) as a guide to develop the 2009-2011 biennial budget proposal. The 2006 DCP-AC recommended a total budget of \$6.4 million. The total budget was comprised of the required adjusted expenditure of approximately \$4.6 million, plus 30% (\$1.9 million), for discretionary funding of various conservation measures proposed by the Implementing Agencies, that were funded from Round 8 of the Southern Nevada Public Lands Act (SNPLMA). The MSHCP provides that expenditures in excess of \$4.1 million per biennium are to be credited to future required expenditures.

The required adjusted expenditure for the 2009-2011 biennium is \$4,813,567. The required adjusted expenditure is a reflection of baseline biennial funding requirements, adjusted for Consumer Price Index (CPI). Staff then adjusted the \$1.9 million recommended by the DCP-AC for discretionary funding from SNPLMA by the same CPI, to arrive at an additional \$2,366,260 and will be credited to future required expenditures. The total proposed biennial budget is \$7,179,827.

Proposed 2009-2011 Implementation Plan & Budget	
\$4,813,567	Required Expenditure
\$2,366,260	Discretionary Adjusted for CPI
\$7,179,827	Total

As Plan Administrator, Clark County prepared the following permit condition or explicit MSHCP required project concepts (see Incidental Take Permit and Section 2.1.8.2 of the MSHCP):

- Administration of the MSHCP (including the imposition and oversight of a \$550-per-acre development fee and implementation of an endowment fund)
- Adaptive management program (develop and administer the AMP)
- Boulder City conservation easement management, maintenance, and law enforcement (maintenance and management of allotments, land, and water rights which have been acquired)
- Desert tortoise hotline and pick-up service (translocation of desert tortoises)
- Clark County Fencing Program (construction, monitoring, and maintenance of barriers along linear features)
- Management of acquired properties and water rights (maintenance and management of allotments, land, and water rights which have been acquired)
- Clark County public information and education program

These project concepts were prepared by staff of the Desert Conservation Program taking into account guidance in the incidental take permit and MSHCP, current status of these efforts, needs anticipated during the 2009-2011 biennium and previous budgets and expenditures (Attachment 6).

The initial estimated total budget of the non-discretionary project concepts proposed by Clark County, as Plan Administrator and on behalf of the permittees, totaled \$5,597,000. This figure exceeded the minimum required expenditure of \$4,813,567 for the 2009-2011 biennium. Staff was then asked to cut each budget request by approximately 15%. After a decrease of approximately 15%, the total budget request for the non-discretionary project concepts was matched with the required adjusted expenditure of \$4,813,567.

With regard to non-permit condition or non-MSHCP-explicit projects, the Implementing Agencies submitted the following project concepts:

- Off Highway Vehicle (OHV) education
- An assessment of post-fire rehabilitation of desert tortoise habitat in Clark County, Nevada
- Restoration of desert tortoise and gypsum habitat
- Relict leopard frog conservation
- Desert tortoise monitoring 2010-2011
- Gypsum habitat restoration methods and associated species research for Lake Mead National Recreation Area
- Mesquite and acacia woodland assessment, monitoring, restoration, and management for Lake Mead National Recreation Area

The initial estimated total budget of the discretionary conservation measures totaled \$3,790,000 and exceeded the proposed discretionary budget of \$2,366,260 by \$1.4 million.

Results of the Permittees' Ranking Process for the Non-Permit Condition Concepts

Project Title	Permittees Rank
OHV education	1
An Assessment of Post-Fire Rehabilitation of Desert Tortoise Habitat in Clark County, Nevada	2
Restoration of Desert Tortoise and Gypsum Habitat	3
Relict Leopard Frog Conservation	4
Desert Tortoise Monitoring 2010-2011	5
Gypsum Habitat Restoration Methods and Associated Species Research for Lake Mead National Recreation Area	6
Mesquite and Acacia Woodland Assessment, Monitoring, Restoration and Management for Lake Mead National Recreation Area	7

Summary of Discussions Among the Permittees

The permittees (Erik Peters, Cheng Shih, John Willis, Paul Andricopulos, Michael Johnson, Julie Ervin-Holoubek, and Jan Schweitzer) met June 4, 2008 to review and validate the results of the rankings and to develop a proposed budget and implementation plan. Clark County provided a summary of the rankings and highlighted areas of difference among individual permittee representative rankings and differences between DRI and permittee rankings.

Results from the individual reviews did vary. This was not unexpected as each of the permittee agencies has a different perspective and interest and each representative providing the scores has a different background, experience, expertise and perspective. The permittees also recognized and reviewed differences between DRI's ranking as Science Advisor and the group's ranking. The permittees found the differences in ranking were reasonably explained by the differences in criteria adopted by each group. For instance, as DRI points out in its review, the OHV Education project concept probably scored "low" in its ranking because the criteria were developed for natural, not social, science issues. Based on the criteria developed by the permittees, which scientific and non-scientific factors, OHV Education ranked very high. The permittees discussed and considered whether these differences were cause for concern and ultimately decided that all were in agreement with average scores and ranking of the group and that no major changes in individual or overall scores were warranted.

During the June 4, 2008 meeting, the permittees also received and discussed the proposed 2009-2011 Implementation Plan and Budget described above. The permittees discussed the overall approach Clark County took in preparing a draft budget and all in attendance were in agreement with the proposed budget, its rationale and how it was developed.

The permittees decided to recommend that the project concept for Desert Tortoise Monitoring be funded at little more than half its original request or \$1,046,260 in order to adhere to the budget cut off (\$7,179,827). The permittees expressed comfort with this scenario given that the USFWS also has access to Section 7 funding, the Conservation Initiatives Category of SNPLMA, and because the other discretionary project budgets were modest in comparison. In addition, as DRI pointed out in its review, the budget for desert tortoise monitoring is substantial, it is not clear how the proposed work and budget fit into the larger overall monitoring program, and how monitoring is actually mitigating for or benefiting the species is not stated. The permittees decided increasing the budget to allow for full funding of Desert Tortoise Monitoring was not justified based on these observations. This recommendation is consistent with the 2006 DCP-AC recommendations, which also did not recommend full funding to the Desert Tortoise Monitoring concept.

The permittees determined that no major changes to the proposed 2009-2011 Implementation Plan and Budget were warranted and authorized Clark County to present it to the Implementing Agencies and public for their review and input.

Proposed 2009-2011 Implementation Plan and Budget Using Permittees Ranking

Project No.	Project Title	Estimated Project Budgets	Adjusted to Meet Budget Cut Off
TBD	Administration	\$ 2,350,000	\$ 2,053,617
TBD	Adaptive Management Program	\$ 1,147,000	\$ 974,950
TBD	Boulder City Conservation Easement Management, Maintenance and Law Enforcement	\$ 400,000	\$ 340,000
TBD	Desert Tortoise Hotline and Pick-Up Service.	\$ 700,000	\$ 595,000
TBD	Clark County Fencing Program	\$ 500,000	\$ 425,000
TBD	Management of Acquired Properties and Water Rights	\$ 300,000	\$ 255,000
TBD	Clark County Public Information and Education	\$ 200,000	\$ 170,000
TBD	OHV Education	\$ 350,000	\$ 350,000
TBD	An Assessment of Post-Fire Rehabilitation of Desert Tortoise Habitat in Clark County, Nevada	\$ 400,000	\$ 400,000
TBD	Restoration of Desert Tortoise and Gypsum Habitat	\$ 300,000	\$ 300,000
TBD	Relict Leopard Frog Conservation	\$ 270,000	\$ 270,000
TBD	Desert Tortoise Monitoring 2010-2011	\$ 1,840,000	\$ 1,046,260
Budget Cut Off			
N/A	Gypsum Habitat Restoration Methods and Associated Species Research for Lake Mead National Recreation Area	\$ 340,000	\$ -
N/A	Mesquite and Acacia Woodland Assessment, Monitoring, Restoration and Management for Lake Mead National Recreation Area	\$ 290,000	\$ -
Total		\$ 9,097,000	\$ 7,179,827

Section 10 - Non-discretionary	\$ 4,813,567
Section 10 – Discretionary To Be Credited	\$ 2,366,260
Total 2009-2011 IPB	\$ 7,179,827

Comparison of 2009-2011 Implementation Plan and Budget Using Science Advisor Ranking

The MSHCP strongly recommends a balance between science, social and political considerations in the development of its budget. As described above, the foundation of the budget process is to balance scientific, social, and political considerations when preparing a budget. Simply prescribing the Science Advisor's scores and their subsequent implications for a budget is not required, nor recommended, by the guidance provided in the MSHCP.

Although not required, Clark County, as Plan Administrator, performed a review of the difference in the proposed budget based on the permittees ranking versus the Science Advisor ranking to look for areas of concurrence and disagreement.

Evaluating the Science Advisor rankings alone, the proposed 2009-2011 Implementation Plan and Budget would look like the following:

Project No.	Project Title	Estimated Project Budgets	Adjusted to Meet Budget Cut Off
TBD	An Assessment of Post-Fire Rehabilitation of Desert Tortoise Habitat in Clark County, Nevada	\$ 400,000	\$ 400,000
TBD	Relict Leopard Frog Conservation	\$ 270,000	\$ 270,000
TBD	Mesquite and Acacia Woodland Assessment, Monitoring, Restoration and Management for Lake Mead National Recreation Area	\$ 290,000	\$ 290,000
TBD	Desert Tortoise Monitoring 2010-2011	\$ 1,840,000	\$ 1,406,260
Budget Cut Off			
N/A	Restoration of desert tortoise and gypsum habitat	\$ 300,000	\$ -
N/A	OHV Education	\$ 350,000	\$ -
N/A	Gypsum Habitat Restoration Methods and Associated Species Research for Lake Mead National Recreation Area	\$ 340,000	\$ -
Total		\$ 3,790,000	\$ 2,366,260

The budget per the Science Advisor and Permittees rankings vary in three ways:

1. Mesquite Acacia Woodland Assessment, Monitoring, Restoration and Management for Lake Mead National Recreation Areas does not receive funding in the permittees ranking while it would on the basis of Science Advisor scoring.
2. OHV Education is funded in the permittees ranking, while it is not in the Science Advisor scenario.
3. Restoration of Desert Tortoise and Gypsum Habitat is funded in the permittees ranking and it is not in the Science Advisor ranking.

In both scenarios, Desert Tortoise Monitoring is the lowest ranked project receiving funds and in both instances the budget for the project must be adjusted to meet the budget cut off.

As described in the request for project concepts, the permittees felt strongly that on-the-ground restoration of ecosystems/habitats for species most directly impacted by take such as the Restoration of Desert Tortoise Habitat and Gypsum Habitat project concept must take priority over planning, research and monitoring activities where no direct species benefit is likely to occur. In addition, the permittees believe that the OHV Education project concept has the capacity to change human behaviors that directly threaten desert tortoise and its habitat, and that the species has a high likelihood of realizing an on-the-ground benefit as a result of this education. For these reasons, the permittees were satisfied with the budget proposed based on their rankings and on June 30, 2008 presented the proposed plan and budget to the Implementing Agencies.

Implementing Agency Meeting to Review Proposed Implementation Plan and Budget

Clark County, as Plan Administrator, hosted a meeting of the Implementing Agencies and Science Advisor to review the proposed budget. Staff from Clark County, BLM, NPS, NDOW, DRI, Cities of North Las Vegas, Las Vegas, Henderson, Mesquite, NDOT, and USFWS was in attendance. Marci Henson, Program Manager, reviewed the draft report and attachments with the group. Judith Lancaster from DRI also presented an overview of the Science Advisor review and ranking process. The group's discussion focused largely on questions regarding how the permittees applied the ranking criteria and their use of the Science Advisor's report and ranking. In summary, the permittees all received DRI's Decision Support System Results Report (Attachment 2) and were asked to review it and take its findings into consideration as concepts were evaluated and rated. A full and complete summary of this meeting is available in Attachment 7.

Public Meeting and Response to Comments on Proposed Implementation Plan and Budget

Comments were received during:

- Public meeting held on July 15, 2008, and (Attachment 8)
- Public comment period open July 15, 2008 – July 29, 2008 (Attachment 8)

Clark County, as Plan Administrator, hosted a public meeting to review the proposed implementation plan and budget and to receive public comments on specific project concepts and the overall budget. Clark County invited all of the implementing agencies to send staff and specifically requested that project proponents be available to answer questions on specific project concepts.

The meeting included an introduction to the MSHCP, its status and plans to amend the MSHCP and incidental take permit. Also included in the introductory presentation was an overview of the budget process and outcomes of the deliberations to date. The public was invited to ask questions and clarify items in the presentation, budget and outcomes of the preliminary deliberations.

Questions and clarifications focused on the process used to arrive at a draft implementation plan and budget. There were two major areas of emphasis that warrant description here. A full accounting the meeting, the public comments received and individual responses can be found in Attachment 9.

The public comments received focused on two areas and can be generally summarized here as 1) the rationale for the process given the MSHCP's emphasis on vetting projects through an advisory committee and 2) the use of the DRI's Decision Support System Results Report (Attachment 2) by the permittees when reviewing and ranking projects. As was explained earlier in this document, Clark County, as Plan Administrator, has identified the budget process as an area of the MSHCP requiring significant revisions in the amendment to the MSHCP. Clark County has notified the USFWS of its intent to pursue a major amendment to the MSHCP. In the short-term, and in order to continue to mitigate for incidental take in good faith, Clark County has proposed a budget process responsive to the key provisions outlined in the MSHCP in developing the 2009-2011 Implementation Plan and Budget, while actively working on a major amendment to the MSHCP. The cost and bureaucracy of seating an advisory committee was not prudent given the desire to contain administrative costs and amend the budget process. The permittees remain committed to the public process as evidenced by the open public meeting held on July 15, 2008 and the open public comment period available from July 15 through July 29, 2008.

As was also explained earlier in this document, the MSHCP strongly recommends a balance between science, social and political considerations in the development of its budget. The foundation of its budgets process is to take scientific, social, and political considerations into account when preparing a budget. Substituting the Science Advisor's scores and their subsequent implications for a budget is not required, nor recommended, by the guidance provided in the MSHCP. Permittees considered the scientific merit of projects by their adoption of criterion number five (5): "To what extent is the project scientifically credible? Is the project highly recommended by the DCP Science Advisor? Projects should have clearly stated objectives, well-designed procedures and realistically attainable results; 15 points strongly meets the criteria; 1 does not meet the criteria at all." Permittees used their best judgment when affixing a score to this criterion and there is no evidence that permittees ignored the Science Advisor's review and ranking. Finally, the purpose of projects funded by the MSHCP is to mitigate for take of covered species and habitats as opposed to funding the best science project proposed.

Final Proposed 2009-2011 Implementation Plan and Budget

Staff recommends that the 2009-2011 biennial budget be \$7,179,827 million; with the minimum required expenditure of \$4,813,567 to fund permit requirements and \$2,366,260 to fund additional discretionary conservation projects that will be deducted from expenditures required in future years. Staff further recommends projects be funded in the priority order illustrated below, which is the result of permit requirements and permittee's ranking of discretionary conservation projects.

Project No.	Project Title	Amount
TBD	Administration	\$ 2,053,617
TBD	Adaptive Management Program	\$ 974,950
TBD	Boulder City Conservation Easement Management, Maintenance and Law Enforcement	\$ 340,000
TBD	Desert Tortoise Hotline and Pick-Up Service.	\$ 595,000
TBD	Clark County Fencing Program	\$ 425,000
TBD	Management of Acquired Properties and Water Rights	\$ 255,000
TBD	Clark County Public Information and Education	\$ 170,000
TBD	OHV Education	\$ 350,000
TBD	An Assessment of Post-Fire Rehabilitation of Desert Tortoise Habitat in Clark County, Nevada	\$ 400,000
TBD	Restoration of Desert Tortoise and Gypsum Habitat	\$ 300,000
TBD	Relict Leopard Frog Conservation	\$ 270,000
TBD	Desert Tortoise Monitoring 2010-2011	\$ 1,046,260
Total		\$ 7,179,827

Section 10 - Non-discretionary requirements	\$ 4,813,567
Section 10 – Discretionary To Be Credited	\$ 2,366,260
Total 2009-2011 IPB	\$ 7,179,827

ATTACHMENT 1



CLARK COUNTY DESERT CONSERVATION PROGRAM MULTIPLE SPECIES HABITAT CONSERVATION PLAN

2009-2011 Implementation Plan and Budget (IPB) Process

2/11 – Implementing Agencies Conference Call

- ✓ Limited to the Required Section 10 expenditure
- ✓ Do not plan to request any Round 10 Southern Nevada Public Lands Management Act funds
- ✓ Plan Administrator, on behalf of the permittees, will prepare project concepts that meet permit conditions and operational requirements
- ✓ Implementing agencies are requested to submit individual, non-permit condition project concepts – limited to their top three priorities
- ✓ Issuing the call for project concepts on 3/3/08

2/28 – Science Advisor and Implementing Agencies craft a Decision Support System

3/3 – Issue call for project concepts to Implementing Agencies

- ✓ Only accepting the Agencies' top three priorities
- ✓ Accepting individual project concepts only - as opposed to programmatic concepts
- ✓ Most interested in projects related to priority species (those that are state or federally listed and those that are covered by the permit and impacted by direct take activities).
- ✓ Most interested in projects that mitigate for the direct impact of (habitat restoration, fencing, road designation, etc.) habitat loss (see 2008 Habitat Loss by Ecosystem Analysis and Land Use Trends Analysis)
- ✓ Most interested in concepts that will fit well into what is likely to be included in the permit and plan amendment

3/28 – Implementing agencies' project concepts due

4/1 – Non-permit condition project concepts to Science Advisor

4/23 – Send draft criteria to permittees for discussion at 5/7 meeting

5/7 – Determine final permittees criteria

5/9 – Send criteria and project proposals to permittees, highlighting that Science Advisor reviews are forthcoming

5/15 – Ranking of non-permit condition project concepts from Science Advisor

5/20 – Send Science Advisor reviews to permittees.

5/27 – Permittees' reviews due to Plan Administrator

6/4 – Permittees discuss reviews, rankings and draft IPB

6/30 – Hold Implementing Agency meeting on draft IPB, 1:30 – 4:30pm, Pueblo Room

7/15 – Publish Draft IPB

7/31 – Hold Public Meeting on Draft IPB and take input and comments, 6:30pm – 8:30pm, Pueblo Room

9/30 – Publish Revised IPB and respond to public comments

12/16 – Take Revised IPB to the Board of County Commissioners

12/31 – Submit IPB to the U.S. Fish and Wildlife Service

ATTACHMENT 2
Decision Support System Report from Desert Research Institute



Project Name: Science Advisor
Project Number: 2005-DRI-574A-P
Deliverable Number: D15
Reporting Period: February 28, 2008 –
May 15, 2008
Project Contact Name and Information:
Mark Stone, Division of Hydrological
Sciences, Desert Research Institute, 775 E
Flamingo Rd, Las Vegas, NV 89119.
Mark.Stone@dri.edu, 702 862 5457.

Decision Support System Results Report Task 10

Introduction

This report describes a process to develop the framework, or Decision Support System, to assist the Clark County Desert Conservation Program (DCP), Adaptive Management Program (AMP), in making decisions regarding the appropriation of future funding and/or implementation of Multiple Species Habitat Conservation Plan (MSHCP) permit conditions and conservation actions. For the recommendations on the 2009-2011 biennial Implementation Plan and Budget (IPB), the Implementing Agreement signatories were invited to participate in a workshop, organized by the County, to design an *a priori* decision support tool. This tool was subsequently used by the Desert Research Institute (DRI) science advisor team to evaluate and rank discretionary (non-permit conditions) conservation action projects proposed for possible funding by the Implementing Agencies.

There are six parts to this report, the first two of which was prepared by Clark County whilst the remaining four were prepared by the DRI science advisor team:

- A description of a workshop to design a Decision Support System
- Details of the project concept solicitation
- A summary of discussions among the DRI science advisor team regarding the scoring strategy for project concepts using the Decision Support System
- A description of the results of the scoring and ranking process
- The Decision Support System matrix showing project concept scores
- Summary.

Decision Support System Design Workshop

The workshop was held on Thursday, February 28, 2008, from 8:30 am to 4:00 pm (although the meeting start was delayed to 9:00 am due to traffic) at the Clark County Government Center, Organizational Development Center, 500 Grand Central Parkway, Las Vegas, Nevada.

Workshop Purpose: To develop a list of science-based criteria that can be used to evaluate non-MSHCP permit condition project concepts.

Participants:

Bureau of Land Management	National Park Service
Carrie Ronning	Ross Haley
City of Henderson	Alice Newton
Paul Andricopulos	Kent Turner
Michael Johnson	Nevada Department of Transportation
City of Las Vegas	Julie Ervin-Holoubek
Eric Peters	James Murphy
Cheng Shih	Nevada Department of Wildlife
City of Mesquite	Cris Tomlinson
Catherine Lorbeer	Nevada Division of Forestry
City of North Las Vegas	John Jones
Jan Schweitzer	Ruth Siguenza LLC (Facilitator and Student)
Clark County	Ruth Nicholson-Siguenza
Lee Bice	Heidi Bigler-Cole
Marci Henson	U.S. Fish and Wildlife Service
John Tennert	Janet Bair
Sue Wainscott	
Desert Research Institute (Science Advisor to DCP)	
Judith Lancaster	
Dave Mouat	
Mark Stone	

Opening and Introductions

Goals: To introduce meeting participants and their roles. To review the meeting purpose and agenda.

County staff and the facilitator opened the meeting. The County provided an overview of the MSHCP 2009-2011 IPB process (Appendix 1) and explained to the group how the day's workshop fit into that process.

Identify and Sort Project Evaluation Criteria

Goals: To list project evaluation criteria from all meeting participants. To separate scientific criteria from other criteria. To group major categories of criteria, as appropriate.

The group worked in small groups of 2-5 participants to produce a set of 48 ideas for possible criteria and placed them on the whiteboard. The facilitator guided the group in sorting the possible criteria into similar sets. These possible criteria and sets were:

Appropriate Mitigation	<ul style="list-style-type: none"> • Mitigate impacts of habitat loss under the permit on covered species • Is the project mitigating impacts to the habitat and ecosystems most impacted by the permit • Think of big picture
Enforcement	<ul style="list-style-type: none"> • Ability to enforce the regulations • Enforcement of the conserved area
Sustainable Development	<ul style="list-style-type: none"> • Impact on water resources • Effects on transportation (roads, trails) • Ability to continue development • Does the project account for impacts that result from construction of sustainable technology • Reinforces responsible planning/development
Education	<ul style="list-style-type: none"> • Reinforces responsible recreation
Edge Effect	<ul style="list-style-type: none"> • Reduces edge effects of development • Transition between developed areas and conservation areas
Priority Species	<ul style="list-style-type: none"> • SWFL (Southwestern Willow Flycatcher) • White-margined penstemon • Desert tortoise • Las Vegas bearpoppy • Las Vegas buckwheat • Relict leopard frog • Sticky buckwheat
Population Augmentation	<ul style="list-style-type: none"> • Augments populations of imperiled species • Augments populations of priority species • Augments populations of species at risk - where science is known
Priority Habitat	<ul style="list-style-type: none"> • Action that benefits multiple species • Protects habitat of high priority species • Does the project focus on most at-risk species/ecosystems
Habitat (protect, enhance, restore)	<ul style="list-style-type: none"> • Habitat enhancement or improvement • Protects and/or improves habitat for target species • Improve habitat quality (increase K: K=scientific notation for carrying capacity for a species) • Does project consider/address minimizing catastrophic fires • Projects that reduce habitat degradation • Protects habitat • Restores habitat of at risk species - where habitat is limiting e.g. SWFL • Habitat restoration

Knowledge and Information Gaps to Inform Management Decisions	<ul style="list-style-type: none"> • Does the project fill a high priority knowledge gap? Reduce uncertainty • Research on impacts to species • Will the project result in new information? Or will it tell us what we already know • Additional data on bearpoppy; i.e., growth in other soils, longevity, feasibility, etc. • Provides key data gap in understanding meta populations • More ground research for buckwheat • How much scientific data is available to use
Effectiveness	<ul style="list-style-type: none"> • How effective is tortoise fencing • Does project consider climate change • A value judgment on effectiveness of the proposed action or project • Project effectiveness should be measurable • Does project consider effectiveness monitoring
Methods	<ul style="list-style-type: none"> • Are the project methods scientifically defensible? Grounded in the literature • Is the research methodology sound

The group discussed each set and determined that several belonged in the Other (not-science) criteria board. These sets were: Enforcement, Sustainable Development, and Education. The group also determined that the set of Edge Effects contained possible project concept ideas, rather than possible criteria.

The group asked the DRI science advisor team and the DCP's AMP staff to discuss the remaining science-based criteria sets and report back after lunch on what data exist to inform scoring of project concepts.

Data Check

The County presented a proposal from the AMP staff and the DRI science advisor team regarding which criteria had available data, literature or expert opinion to support their use. DCP's AMP staff described the DCP geodatabase of species, habitat, ecosystem and land use data currently available to the program. Available information for the DRI science advisor team includes datasets, grey literature, published literature and expert opinion of DRI team members. The group discussed and clarified the proposed criteria and what information would need to be provided to DRI to assure a transparent and informed sorting of the project concepts.

The accepted modification of this proposal was:

Criterion 1: Priority Species Is the project key to population sustainability of a priority species?

Criterion 2: Priority Habitats/Species/Ecosystems Does the project benefit Impacted Priority ecosystems/habitat or species? Explain.

Criterion 3: Pick One of the following two depending on type (information gathering / implementation) of project concept:

Habitat/Species Benefit Type (What?) What does the proposed action do to benefit the species and its habitats by mitigating impacts and or threats? The group discussed at length whether any one of the following types of implementation projects was more important: Enhance, Protect, Restore. The group decided to allow the Science Advisor to rank the benefit of each type as well as incorporate the proportion of a species distribution addressed by the project concept with rationale that are defined up front, prior to Science Advisor assigning any scores to project concepts.

Knowledge/Information to Inform Management (What?) Is the knowledge gap either (1) Cited in an assessment (need a list of documents) as a high priority, or (2) shown as a tight link of information to a management decision?

Criterion 4: Effectiveness Likelihood/Method (How?) How likely is the project concept to be effective at meeting its stated goal?

Priority Species (Criterion 1) are defined as: Federal listed species, State listed species, and Candidate Species Covered in MSHCP (Desert Tortoise, SW Flycatcher, LV Buckwheat, Rana onca, Las Vegas bearpoppy, sticky buckwheat, white-margined penstemon, yellow-billed cuckoo). (As per the actions list for this meeting, USFWS, the County and others will determine the final list of priority species for this criterion for the 2009-2011 IPB process early the week of March 3.)

Priority Impacted Species (Criterion 2) are defined as: covered species directly impacted by direct take under permit. This list will be populated by the species hypothesized (in the MSHCP documents) to be found in the three ecosystems most impacted by the direct take under the permit to date, as described in the County's most recent Habitat Loss by Ecosystem report (Appendix 2).

The DRI science advisor team emphasized to the group that project concepts should include information on each of these criteria in the narrative and provide copies of and citations to literature, grey literature and datasets that could be used in evaluating the project concept.

During this portion of the meeting, several additional issues were raised and placed in the *Parking Lot*. These issues are listed below under Wrap Up and Closing.

Ranking and Weighting Criteria

The group assigned each criterion a possible rating of 0-10, higher number = higher priority. The group discussed different weighting of criteria, but declined to assign a higher or lower weight to any of the criteria. The scores are to be added across all applicable columns for each project concept, with a possible summary score range of 0 –

40. DRI's May 15 report will include a description of methods used for each criterion to assign scores and what information sources were used.

Wrap Up and Closing

The facilitator reviewed the Parking Lot and Actions Board with the group. The Parking Lot contained the following items:

- ◊ Permit Amendment: How to persuade HOA and others to decrease take impacts.
- ◊ Reduce impacts (direct and indirect) of take (tangible and research).
- ◊ Climate change in permit amendment?
- ◊ Addressing edge effects in permit amendment
- ◊ Amendment: how to handle non-listed species.

The Actions Board contained the following item:

- ◊ County, USFWS and Others will decide on priority species list after the workshop.

The group identified the following items they appreciated about the meeting:

- ◊ facilitation
- ◊ right participants
- ◊ open forum
- ◊ enough breaks
- ◊ facilitator.

The group said they would like to see:

- ◊ more time to discuss/follow-up
- ◊ need more interaction

The meeting adjourned at 4:00 pm.

Project Concept Solicitation

Clark County staff developed a Project Concept form and provided it to each of the Implementing Agreement signatory agencies (Appendix 3). Each agency was allowed to submit up to three project concepts for consideration. A total of seven project concept forms were submitted to Clark County by the deadline, and these were bundled and sent to DRI.

Decision Support System Scoring Strategy

The DRI science advisor team on this task consists of three members, with diverse backgrounds. All meetings, conference calls, emails and face-to-face discussions on criteria, sub-criteria, scoring strategy and reporting occurred in advance of any team member looking at any of the project concept papers. DRI consulted with Clark County during this "strategy development" phase to clarify points raised during the February 28, 2008 workshop, and to make sure the scoring strategy options and decisions were compliant with group perceptions and preferences. Written records of all interactions were made, and the following sections are excerpts.

Criterion 1: Is the project key to population sustainability of a priority species?

Addressing five species is not necessarily better than addressing one. If there is no reference at all to a species the score would be zero. Indirect reference (for example, the proposal was really for trail improvement but the author justified it by saying that better trails would result in people not damaging off-trail areas and species 'x' which was growing/living there) would likely not get the top score on this criterion, but if the concept paper were well-written it might make up for it on other criteria.

The team agreed that descriptions for four possible scoring categories were as follows:

- Fully, and well, shows that the project would benefit a key species.
- Shows that the project would, or would somewhat, benefit a key species.
- Partially, or rather weakly, or indirectly, shows that the project would benefit a key species.
- Does not show, or scarcely shows that the project would benefit a key species, or doesn't refer to any species.

With associated scores of 8 to 10, 6 or 7, 3 to 5, and 0 to 2 respectively.

Criterion 2: Does the project benefit impacted priority ecosystems/habitat or species?

Explain.

The phrasing on the scoring categories will basically be the same as for Criterion 1, but addressing habitats. Concept papers which do not provide any explanation here would score very low.

Criterion 3: Habitat/species benefit type or, knowledge/information to inform management.

The team remembered the struggle the workshop participants had with this, and that 3A is "information gathering", versus "implementation" for 3B. However it was thought likely that 2 and 3A may score similarly for some of the project concepts.

It was noted that the DRI science team was to rank the implementation type (enhance, restore, protect), and after discussion it was agreed that protection was most beneficial (important), followed by enhancing and restoring in that order. The fact that a really good restoration project is very valuable and might be "better" than an intermediate protection one was recognized, but a decision was made that even an exceptionally good restoration project concept paper will only score 8 (maximum), similarly, enhancing a 9, but potentially protection could score 10 – thereby recognizing the relative importance of these activities in the broader contexts of adaptive management and ecosystem health.

Criterion 4: How likely is the project concept to be effective at meeting its stated goal?

This is the connection between project and goal. So to be scored high, goal and concept must be really clear - explicit, and well referenced. It will score low if it has unjustified assumptions, or a high level of uncertainty of outcome – dependent on weather for example. Again the wording of the descriptive phrases detailed under Criterion 1 will be appropriate – with minor adjustments for the topics.

Discussion of Strategy and Possible Issues

Although a score range of 0 to 10 was probably a greater resolution than necessary, it means that each of the four “score brackets” would cover a range of two to three score points and this was considered advantageous. The “tie maker/breaker” idea did not receive approval from the workshop participants, however, everyone at the workshop agreed that Criterion 4 was vital – therefore if a project concept had no chance of success it should not be funded, would score low and be ranked last.

The topics covered by the first five classes/criteria on the list (in workshop section above) are not represented in the criteria for scoring, but are important and are also “buzz concepts” (e.g., sustainable development). Concept papers mentioning any of these could well be scored somewhat higher than those which do not. The group voted against bonus points, but inclusion of any of these topics could be something to comment upon as the DRI science advisor team writes up their notes on the ranking (see Results of Scoring and Ranking Project Concept Papers below)

The DRI science advisor team developed a set of sub-criteria which comprised factors that would be taken into consideration during scoring (Table 1). The team decided that some of these sub-criteria (e.g., “Is project likely to be successful at meeting its goals?” under criterion 4) were absolutely critical (marked AC in second column from the left on the Table 1 spreadsheet), others critical (marked C in the second column from left), whilst others (with no notation in second column from left) were for reviewer guidance and consideration during scoring. It was agreed that the “set” of sub-criteria which comprise each criteria will receive the score, not individual sub-criteria. For example, population dynamics might be critical for some species, but not in the case of, say, the Desert tortoise. What is being scored is what the project SAYS it is going to accomplish, but all agreed that if everyone thought something should be added that isn’t mentioned, it would be noted but probably would not affect the score. The team wondered how explicit notes would need to be on this process, and discussed again the importance of professional experience. Team members will inevitably use professional opinion for big picture issues, and this is acceptable.

The first stage is for the three people on the DRI science advisor team for this task to score independently and then meet and see how closely their scores correspondence. In some cases, even if one project concept scores high it might rank lower if it were carelessly written, for example, for a recent DRI search the cover letter was written to a different institution, not DRI, and that person was not even considered for interview. Hopefully an analogous situation will not arise with the project concepts. The question of whether to ask anyone else at DRI to score too was discussed, but it was decided that the three-person team was adequate, especially as everyone had participated in the February 28th workshop and knew the issues, system etc. It was agreed that if results from the three science advisor team reviewers were significantly inconsistent the concept papers affected would need careful discussion. It is possible that someone might miss something, and decide to change their score after/during discussion – in that case a record of the initial score will be kept and the change justified.

Table 1. Science Advisor Project Concept Scoring 2009-2011 Biennium.

4/4/08

Criterion	Topics for evaluator consideration. AC = absolutely critical, C=critical	Project Concept by Title						
		A	B	C	D	E	F	G
1: Priority species	AC	Addresses issues relating to a priority species						
		Addresses issues relating to an impacted species						
		Concerns population dynamics						
	C	Reflects understanding of sustainability issues for species in question Benefits multiple species						
2. Priority habitats		Benefits priority impacted ecosystem, or						
		Benefits impacted habitat, or						
	AC	Benefits impacted species Shows understanding of ecosystem-species relationship Provides explanation of project relevance						
Either 3A: Implementation	AC	Relates to mitigating impacts or threats						
	AC	Specifies whether protecting, enhancing (max =/ < 9) or restoring (max =/ < 8) Shows understanding of, or at least refers to differences in duration/intensity and cause-effect						
	AC	What % of species distribution is targeted, or does proposed work have broad significance for entire species distribution?						
Or 3B: Information	AC	Is a priority goal, objective or information gap identified?						
	AC	Contributes new or missing knowledge/data						
	AC	Clear link to management need included						
4: Methods	AC	Goal explicitly stated						
	AC	Methods provided						
	AC	Is project likely to be successful at meeting its goals? Is a steep learning curve involved before project will be operational?						
	C	Does area to be studied match with intensity of effort/cost? Is adequate time allowed for?						

Table 1. Science Advisor Project Concept Scoring 2009-2011 Biennium (continued).

4/4/08

Criterion Required	Project Concept by Title						
	A	B	C	D	E	F	G
General	Topics for evaluator consideration. AC = absolutely critical, C=critical						
	Is location map provided, or location adequately described?						
	Are citations and/or references to documents included, if applicable?						
	No score - but may be acknowledged in reviewer comments Are concepts thought through and proposal clearly written?						
If appropriate, are other issues (e.g., sustainable development) mentioned?							
Is an education component mentioned?							
Is it relatively easy to see how the effectiveness of the proposed activity could be measured?							
Is activity likely to be dependent on weather or other uncontrollable factors?							

Results of Scoring and Ranking Project Concept Papers

The DRI science advisor team members were in general agreement on the project concept papers, and were pleased that all authors had complied with requests on formatting and inclusion of citations and a location map.

In general it is not clear from most of the papers whether their proposed activity would fall under “implementation” or “information gathering” (Criteria 3a and 3b respectively). The DRI team compared notes on their individual decision for this criterion during their first meeting, which resulted in three adjustments from 3b to 3a, and one from 3a to 3b. There were no major changes in score as a result of these adjustments, and the two categories with associated scores are shown in Table 2. One of the DRI team scored the paper “Gypsum Habitat Restoration Methods and Associated Species Research for Lake Mead National Recreation Area (National Park Service)” substantially higher than the other two on criterion 1, but in discussion with the other team members agreed that this should be lowered as the paper relates primarily to habitat.

The seven project concept papers were discussed in alphabetical order after the science advisor team members had completed their reviews. The following sections comprise reviewer comments upon each of them in order of priority - starting with the paper which ranked highest, scores are shown in Table 2.

As Assessment of post-Fire Rehabilitation of Desert Tortoise Habitat in Clark County, Nevada

The proposed work builds on two years of monitoring following wildfires which occurred in 2005. The monitoring effort will improve information regarding restoration of post-fire sites with Desert Tortoise as benefitted species. Although the monitoring area is relatively small, the new information will be valuable to land managers in and outside of the study areas. The work will complement related work by the USGS on monitoring tortoise behavior in burnt habitat.

The concept paper is well written with appropriate references and a clear and informative map. The authors provided adequate information for the reviewers to understand the larger context of modified fire regimes and the associated impacts on priority habitat for the desert tortoise. An appropriate level of detail was given to provide the reviewers with confidence that the proposed work will be thoroughly and effectively completed. As a continuation of ongoing work, the monitoring effort is likely to be successful. The project addresses a priority species, desert tortoise, but indirectly by monitoring habitat rehabilitation.

Relict Leopard Frog Conservation

This is a good and comprehensive project concept paper with an informative map and a list of pertinent citations. A priority species is clearly identified and population sustainability is directly addressed. How and to what extent the project will address priority habitat is not easy to assess. Study sites are already known, which increases

Table 2. Science Advisor Project Concept Scoring 2009-2011 Biennium.

Criterion	Project Concept by Title																							
	Post-fire rehab			Leopard frog			Mesquite acacia			DT monitoring			Restoration DT/gyp			OHV education			Gypsum restoration					
	MS	JL	DM	MS	JL	DM	MS	JL	DM	MS	JL	DM	MS	JL	DM	MS	JL	DM	MS	JL	DM			
1: Priority species	8	6	8	8	8	9	7	5	7	4	7	6	6	5	8	6	5	6	4	4	4	4	2	4
2: Priority habitats	9	8	8	7	8	7	7	6	8	7	8	5	6	5	5	6	7	7	5	7	8	8	5	5
3a. Implementation	9	8	7	7	4	8								7	7	6	7	3	5					
3b. Information							7	8	8	8	8	7								5	8	5	8	5
4: Methods	8	7	8	8	8	8	8	8	8	6	7	5	6	5	6	4	8	7	5	5	8	8	8	4
Total	34	29	31	30	29	31	31	26	31	25	30	24	25	22	26	22	27	23	19	21	26	18	26	18
Total for all Reviewers			94			90			82		79		79			70			69			65		
Rank			1			2			3		4		4			5			6			7		

confidence in the successful outcome of the effort. The proposed project will build upon ongoing activity described in the concept including vegetation removal and breeding pool improvement. Threats and stressors are identified. It is, however, challenging to assess whether the concept was an implementation or information gathering project.

The project description and methods are sufficiently detailed for review. The proposed activity would address several management actions recommended in the Conservation Assessment and Strategy for the frog, and would seem to benefit other species (such as springsnails) in the process of removing exotic fish species. The goal is ambitious, but the proposed activity has a good chance of meeting it successfully.

Mesquite and Acacia Woodland Assessment, Monitoring, Restoration and management for Lake Mead National Recreation Area (National Park Service)

This is a good project concept paper, with a clear map and some citations. Although priority species are not directly addressed, clear connections are made to priority habits and species including the phainopepla, vermilion flycatcher, and several other species. The authors did a good job of describing the ecological benefit of the proposed activity – which is set in the bigger picture context of patch integrity, threats and stressors and human impacts. The project is likely to meet at least some of its stated goals.

The methods section is clear and in sufficient detail. The approach appears to be comprehensive and viable, and likely to meet the project goals and produce useful results. Several recommended management actions would be implemented by this effort.

Desert Tortoise Monitoring 2020-2011

The proposal is clearly written, with a stated goal of providing viable evidence toward delisting of desert tortoise. The proposed work would continue ongoing monitoring efforts of Desert Tortoise. However the benefit to the species (criterion 2) is not stated. The project goal is exceedingly long-term, but the proposed activity will possibly contribute toward its success. The map does not have a legend (or scale), but it is presumed that the study areas are outlined in blue. Appropriate references are provided.

There is minimal “justification” for the proposed activity and selected methods. One reviewer felt the need to do additional reading to confirm sampling and data collection methods. The budget is substantial (much higher than the other proposals) and, unlike other concept papers, no basic break-down is provided. It also is not clear how the proposed work and budget fit into what is apparently a much larger overall monitoring program.

Restoration of Desert Tortoise and Gypsum Habitat

The stated project goal is restoration of desert tortoise and gypsum habitat. Although desert tortoise and five other species are identified as benefiting from the work, the proposed activity is basically habitat restoration. This project concept paper does not provide thorough details in terms of activities and methods. Although not provided in a compelling manner, the proposed activity would likely achieve at least a portion of the project’s stated objectives.

No new science is proposed and data gaps in knowledge identified which might be filled by the project is not identified. The explanation of benefit, required under criterion 2, is very minimal. As with any study involving human impacts, it is difficult to be sure that this proposed activity will meet project goals.

The project map shows IMA, LIMA, MUMA, and UMAs but study sites have not been identified, making it impossible to evaluate the portion of habitat addressed. The citations are limited. The impacts of the proposed work are clearly identified.

OHV Education

This is the “odd man out” among the project concept papers as it related to education rather than species and habitats. However, benefits to seven priority species are stated and some good ideas are presented. It is possible that this scored “low” because the criteria were developed for natural, not social, science issues and it is difficult to assess how the proposed activities will impact priority species and habitats.

The paper is clearly written, with a good map, and a list of citations. The methods section provides adequate detail and the cost breakdown was useful in helping the reviewers understand the project approach. Six conservation management strategies identify the need for improved habitat of the kind which would likely result from the successful implementation of the proposed activity. It is, however, difficult to predict how successful the proposed activity will be at meeting the stated goals.

Gypsum Habitat Restoration Methods and Associated Species Research for Lake Mead National Recreation Area (National Park Service)

This project concept paper is well written, with a good map and some references. The methods section is thorough. This is habitat rather than species-oriented, although two priority plant species and one priority impacted plant species would benefit. The project goal is well stated, so that it is moderately likely that the project would be at least partially successful. However, evaluating the extent to which priority species and habitats would benefit is very difficult.

The research appears solidly grounded, it relates to population sustainability, and addresses gaps in knowledge relevant to the bigger picture – fire, invasives, fragmentation. Project results are likely to have broader application for management.

Summary

In summary, the DRI science advisor team agreed that there were no “poor” project concepts submitted. The two relating to desert tortoise were unexpectedly weak, but were not ranked lowest due to their explicit potential benefit to a priority species. Benefit to species is implicit in the two lowest ranking project concept papers, and their respective educational and restoration focus, although highly commendable and potentially worthwhile, were not sufficient for their higher ranking in the context of the other papers reviewed. The top three were all interesting, worthwhile, would likely be successful and would provide information that would be directly of benefit to both

management and species. There are many challenges in establishing and operating a habitat conservation plan, and most proposed activity would contribute to the potential success of the Clark County program.

Literature Consulted

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USFWS. 2000. Intra-Service Biological and Conference Opinion on Issuance of an Incidental Take Permit to Clark County, Nevada, for a Multiple Species habitat Conservation Plan. USFWS, Reno, Nevada. 237 p.

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ATTACHMENT 3
Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Project Concept Summary Form: 2009-2011 Biennium
Due: March 28, 2008

Instructions, template form follows on last page.

General Guidance: Implementing Agencies are asked to prepare and submit their top three individual, non-permit condition project concepts using the form provided by close of business March 28. The permittees are most interested in funding projects that mitigate for the direct impact of habitat loss, largely as a result of development activities in the Las Vegas valley. The permittees are also most interested in funding projects benefiting priority species and priority impacted species listed below. The permittees will also be looking to fund projects that will fit well in the implementation of an amended incidental take permit and habitat conservation program.

Project concepts shall be no more than two (2) pages in length.

Project Name: Enter the name of your project.

Location of activities: Indicate the MSHCP Management Area (IMA/LIMA/MUMA/UMA) and land manager/owner. Briefly describe project location and provide a map of the project area no larger than 8.5 x 11 page as Attachment 1. ArcGIS compatible GIS files of the project location are appreciated.

Project Goal: State the goal and/or objective(s) of the project.

Project Description and Anticipated Benefit: Describe the project and what benefit the project would provide to priority or priority impacted species, habitats and/or ecosystems. Will the project benefit be achieved at the species, habitat or ecosystem level?

Priority Species

COMMON NAME	SCIENTIFIC NAME
yellow-billed cuckoo	<i>Coccyzus americanus</i>
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>
desert tortoise	<i>Gopherus agassizii</i>
relict leopard frog	<i>Rana onca</i>
Las Vegas bearpoppy	<i>Arctomecon californica</i>
Las Vegas buckwheat	<i>Eriogonum corymbosum</i> var. <i>nilesii</i>
sticky buckwheat	<i>Eriogonum viscidulum</i>
white-margined beardtongue	<i>Penstemon albomarginatus</i>

Priority Impacted Species

COMMON NAME	SCIENTIFIC NAME	TAXON GROUP	Salt Desert Scrub	Mojave Desert Scrub	Mesquite Catclaw Acacia
phainopepla	<i>Phainopepla nitens</i>	Bird			Y
Vermillion flycatcher	<i>Pyrocephalus rubinus</i>	Bird			Y
long-eared myotis	<i>Myotis evotis</i>	Mammal	Y		Y
Silver-haired bat	<i>Lasiorycteris noctivagans</i>	Mammal	Y		Y
banded gecko	<i>Coleonyx variegatus</i>	Reptile		Y	Y
California (common) king snake	<i>Lampropeltis getulus californiae</i>	Reptile	Y	Y	
desert iguana	<i>Dipsosaurus dorsalis</i>	Reptile	Y	Y	Y
desert tortoise	<i>Gopherus agassizii</i>	Reptile	Y	Y	
glossy snake	<i>Arizona elegans</i>	Reptile	Y	Y	
Great Basin collared lizard	<i>Crotaphytus insularis bicinctores</i>	Reptile	Y	Y	Y
large-spotted leopard lizard	<i>Gambelia wislizenii wislizenii</i>	Reptile	Y	Y	
Mojave green rattlesnake	<i>Crotalus scutulatus scutulatus</i>	Reptile		Y	
sidewinder	<i>Crotalus cerastes</i>	Reptile	Y	Y	Y
Sonoran lyre snake	<i>Trimorphodon biscutatus lambda</i>	Reptile		Y	
speckled rattlesnake	<i>Crotalus mitchellii</i>	Reptile	Y	Y	
western leaf-nosed snake	<i>Phyllorhynchus decurtatus</i>	Reptile	Y	Y	
western long-nosed snake	<i>Rhinocheilus lecontei lecontei</i>	Reptile	Y	Y	
western red-tailed skink	<i>Eumeces gilberti rubricaudatus</i>	Reptile			Y
alkali mariposa lily	<i>Calochortus striatus</i>	Plant		Y	
blue diamond cholla	<i>Opuntia whipplei var. multigeniculata</i>	Plant		Y	
forked (Pahrump Valley) buckwheat	<i>Eriogonum bifurcatum</i>	Plant	Y		Y
Las Vegas bearpoppy	<i>Arctomecon californica</i>	Plant	Y	Y	
Parish's phacelia	<i>Phacelia parishii</i>	Plant	Y		
Spring Mountain milkvetch	<i>Astragalus remotus</i>	Plant		Y	
sticky buckwheat	<i>Eriogonum viscidulum</i>	Plant		Y	
sticky ringstem	<i>Anulocaulis leisolenus</i>	Plant	Y	Y	
threecorner milkvetch	<i>Astragalus geyeri var. triquetrus</i>	Plant		Y	
white bearpoppy	<i>Arctomecon merriamii</i>	Plant	Y	Y	
white-margined beardtongue	<i>Penstemon albomarginatus</i>	Plant		Y	

Project Approach / Methods: Describe the methods of the project in sufficient detail for readers to be able to assess its likely effectiveness in achieving stated goal/objectives. Provide supporting data, literature (grey or published), or observations.

Estimated Project Cost: Provide the estimated cost of the project, rounded to the nearest \$10,000.

For Information Gathering/Research-Related Projects: Describe how this project addresses a priority goal, objective or information gap described in a Conservation Management Strategy, Assessment, Conservation Agreement or other planning document?

(See below link for several such documents:

http://www.accessclarkcounty.com/daqem/epd/desert/dcp_reports.html)

Indicate the goal/objective/gap, name and date of plan, and page number for goal/objective/gap.

Describe how the new information collected will inform specific management decisions.

Citations/Literature List: Provide a list of citations and other pertinent literature as Attachment 2.

Submittal Instructions:

Complete proposals must be submitted electronically via e-mail to Marci Henson at mhenson@co.clark.nv.us by 5:00 p.m., March 28, 2008. Proposals will not be accepted after this date and time. Hard copies of proposals will not be accepted.

Project concepts shall be no more than two (2) pages in length, excluding Attachment 1 - Map of the Project Location and Attachment 2 - Citations and Literature List. Concepts more than two pages and those that are incomplete or omit the information requested in this guidance will not be reviewed or considered for funding.

No more than three project concepts will be accepted per agency.

**Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Project Concept Summary Form: 2009-2011 Biennium
Due: March 28, 2008**

Project Name:

Location of activities, MSHCP Management Area (IMA/LIMA/MUMA/UMA) and land manager/owner (8.5x11 map attached as Attachment 1):

Project Goal:

Project Description and Anticipated Benefit:

Project Approach / Methods:

Estimated Project Cost:

For Information Gathering/Research-Related Projects: Does this project address a priority goal, objective or information gap described in a Conservation Management Strategy, Assessment, Conservation Agreement or other planning document?

Citations/Literature List (Attached as Attachment 2)

ATTACHMENT 4
Non-Permit Condition/MSHCP Explicit Project Concepts

**Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Project Concept Summary Form: 2009-2011 Biennium
Due: March 28, 2008**

Project Name:

An Assessment of Post-Fire Rehabilitation of Desert Tortoise Habitat in Clark County, Nevada

Location of activities:

Monitoring and assessment activities will occur in and adjacent to areas burned during six wildfires on Federal land managed by the Bureau of Land Management (BLM) in 2005. Specific areas to be monitored include desert tortoise critical habitat in the Mormon Mesa and Gold Butte Critical Habitat Units (IMA), Red Rock Canyon National Recreation Area (LIMA) and the area of the Goodsprings Fire (MUMA) (Attachment 1).

Project Goal:

The goal of this project is to continue an additional two years of monitoring of the post-fire treatments implemented by the BLM as part of their Emergency Stabilization and Rehabilitation Program in desert tortoise habitat burned during 2005 wildfires. Dr. Lesley DeFalco (U.S. Geological Survey) and Dr. Scott Abella (University of Nevada Las Vegas), have developed and implemented a monitoring program to evaluate the effectiveness of these rehabilitation treatments. Funding for these monitoring efforts ends in August 2008, three years after the fires. Restoration in the Mojave Desert takes time due to the extreme environmental variation and additional monitoring is necessary to determine what treatments are most effective in restoring Mojave Desert scrub communities.

Project Description and Anticipated Benefit:

Wildfire has been identified as a major threat to the survival and recovery of the desert tortoise (*Gopherus agassizii*) (Mojave population) (U.S. Fish and Wildlife Service (Service)1994). In 2005, wildfires burned approximately 10 percent (500,000 acres) of the desert tortoise habitat in the Northeastern Mojave Desert Tortoise Recovery Unit (Service 2005). The Service is concerned with the recovery of this habitat that not only supports the desert tortoise but many of the other reptile species covered under the Clark County MSHCP. These 2005 fires were fueled in large part by exotic annual grasses, such as red brome, that proliferated after a very wet fall and winter. The Mojave Desert is generally not considered fire adapted (Brooks 1999, Esque and Schwalbe 2002) and fires in arid lands may initiate a "grass-fire cycle" (D'Antonio and Vitousek 1992).

The monitoring program was designed to evaluate a variety of post-fire treatments designed to rehabilitate habitat for the desert tortoise. The program established a network of long-term monitoring sites which incorporate spatial information on soils and climate in creosote bush-Joshua tree and blackbrush shrublands that will be used to predict where the build-up of fine fuels occurs prior to the fire season and to prescribe the most effective treatments for rehabilitating habitats impacted by future fires. Restoration treatments included broadcasting native perennial forbs and shrub seeds, outplanting greenhouse raised seedlings

of native species, applying soil amendments to prolong soil moisture for seedlings, and applying herbicides to reduce invasive grasses and enhance native plant establishment.

Monitoring of the effectiveness of these rehabilitation treatments is important for several reasons. The results derived from this monitoring will provide land managers essential tools to make decisions based on sound evidence regarding improving desert tortoise habitat impacted by fires. New information will be gathered on seed applications, red brome treatments, and shrub outplantings. Information produced from this long-term monitoring will also be applicable to other land reclamation activities for right-of-way projects, minerals reclamation projects and general restoration projects for land disturbed by off-road-vehicles and other types of recreation. The post-fire treatment monitoring will parallel independent efforts by USGS to monitor the behavior of the desert tortoise as they utilize habitats recovering from burns.

Project Approach / Methods:

The monitoring network consists of monitoring plots on six fires in Clark County in locations where post-fires rehabilitation treatments have occurred. Plots are set up with a statistically rigorous design, and include treatment plots, untreated burned control plots, and unburned references plots. The references plots are used to determine if recovery objectives have been met. Vegetation sampling in the monitoring plots includes the density of perennial species, density of seeded perennial species, and species richness and production of annual plants. Rain gages and temperature probes are established across the monitoring network.

More information on the monitoring methods and results from the first several year of monitoring can be found in the following documents: *Monitoring the Effectiveness of Seeding Burned Critical Habitat for the Desert Tortoise 2006 Progress* (DeFalco et al. 2007), and *Early Post-Fire Succession on a Mojave Desert Burn: Dominance By Native Perennials And Reduced Bromus Rubens* (Abella et al. in review).

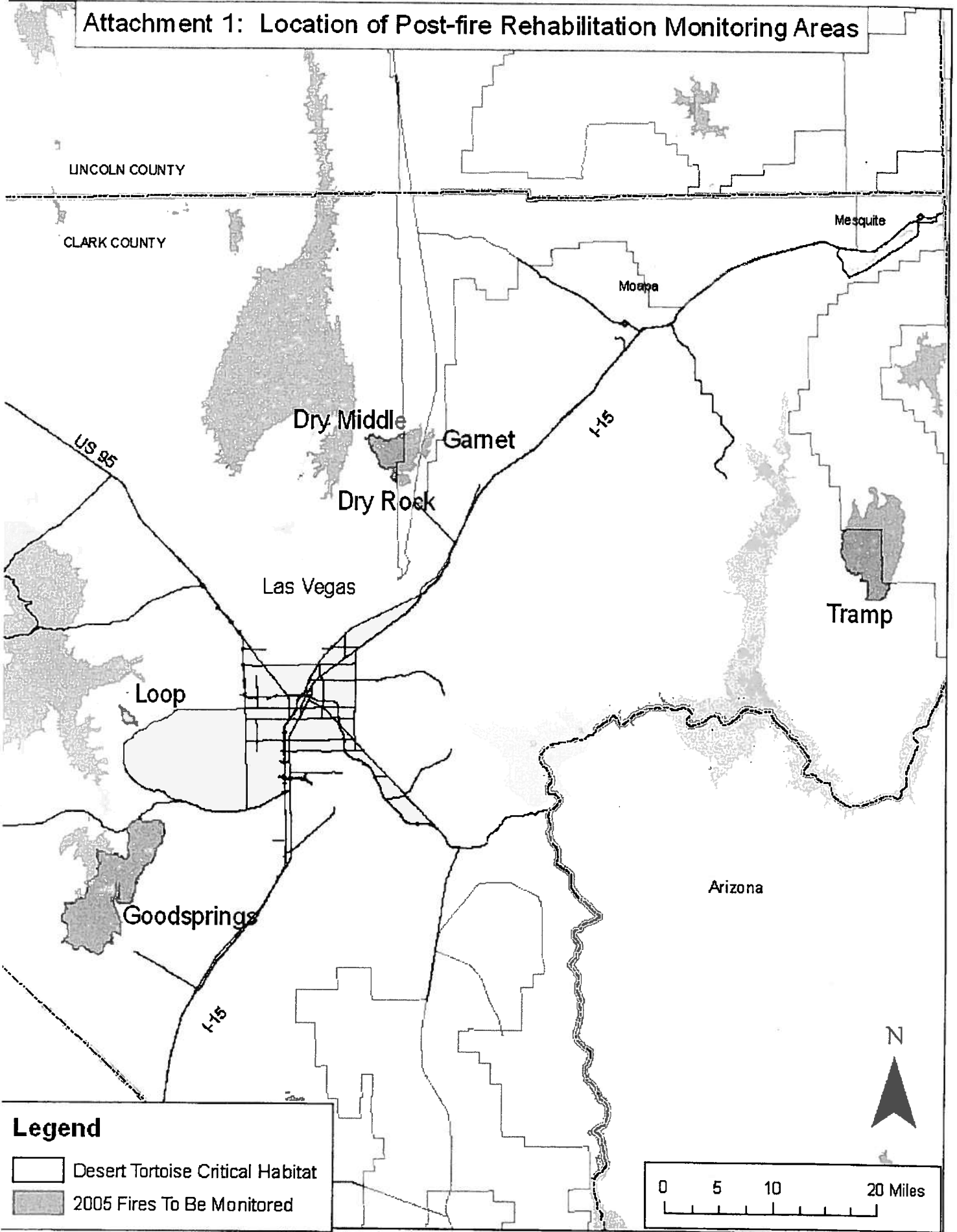
Estimated Project Cost:

Costs will total \$400,000 which will fund two years of effectiveness monitoring. Costs include money for hiring field crews, gas for project vehicles, and costs for equipment and materials.

Does this project address a priority goal, objective or information gap described in a Conservation Management Strategy, Assessment, Conservation Agreement or other planning document?

Wildfire and invasive grasses are threats to the desert tortoise and its habitat identified in the Conservation Management Strategy for the Coyote Springs Desert Wildlife Management Area (Clark County 2007) and in the Conservation Management Strategy for the Gold Butte Desert Wildlife Management Area (Clark County 2007). Information gained from this project will provide land managers essential tools to make decisions based on sound evidence regarding improving desert tortoise habitat impacted by fires.

Attachment 1: Location of Post-fire Rehabilitation Monitoring Areas



An Assessment of Post-Fire Rehabilitation of Desert Tortoise Habitat in Clark County, Nevada

**Attachment 2
Citations/Literature List**

Abella, S.R., E.C. Engel, C.L. Lund, and J.E. Spencer. Early Post-Fire Succession on a Mojave Desert Burn: Dominance By Native Perennials And Reduced *Bromus Rubens*. In review with Madroño.

Brooks, M.L. 1999. Alien annual grasses and fire in the Mojave Desert. *Madroño* 46:13-19.

D'Antonio, C.M., and P.M. Vitousek. 1992. Biological invasions by exotic grasses, the grass/fire cycle, and global change. *Annual Review of Ecology and Systematics* 3:63-87.

DeFalco, L. A., T. C. Esque, K. E. Nussear, S. J. Scoles, M. A. Walden, and K. Drake. 2007. Monitoring the Effectiveness of Seeding Burned Critical Habitat for the Desert Tortoise, 2006 Progress. Prepared for the BLM, Las Vegas Field Office and the Desert Tortoise Recovery Office. Prepared by the Las Vegas Field Station, USGS Western Ecological Research Center. 27 pages.

Esque, T.C. and C.R. Schwalbe. 2002. Alien annual grasses and their relationships to fire and biotic change in Sonoran desert scrub. Pp. 165-194 in Tellman, B. (ed.). *Invasive exotic species in the Sonoran region*. University of Arizona Press and the Arizona-Sonora Desert Museum, Tucson, AZ.

Service (US Fish and Wildlife Service). 1994. Desert tortoise (Mojave population) recovery plan. Portland, Oregon. 73 pages plus appendices.

Service (US Fish and Wildlife Service). 2006. Biological Opinion for the Southern Nevada Fire Complex Burned Area Rehabilitation Plan in Clark and Lincoln Counties, Nevada. Prepared by the Southern Nevada Field Office, Las Vegas, Nevada. October 30, 2006. Service File No. 1-5-06-F-551. 59 pp.

**Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Project Concept Summary Form: 2009-2011 Biennium
Due: March 28, 2008**

Project Name: *Desert Tortoise Monitoring 2010-2011*

Location of activities, MSHCP Management Area (IMA/LIMA/MUMA/UMA) and land manager/owner (8.5x11 map attached as Attachment 1):

This project will take place in desert tortoise habitat throughout Clark County. The land in these areas is managed primarily by the Bureau of Land Management, National Park Service, and USFWS, and are IMAs under the MSHCP. Areas where sampling will occur in Nevada, Utah, and Arizona for a larger project are indicated in Appendix 1; only those areas in Clark County are referred to in this project concept.

Project Goal:

The goal of the project is to provide scientifically credible information to address delisting criteria of the Desert Tortoise (Mojave Population) Recovery Plan (USFWS 1994) and its revision (scheduled to be adopted in 2008).

Project Description and Anticipated Benefit:

This project would continue for 2 years the long-term monitoring of desert tortoise populations in critical habitat, BLM ACECs, national parklands, and adjacent habitat on public lands. The annual monitoring effort includes training, data collection, quality control and database production, as well as analysis. The desert tortoise (*Gopherus agassizii*) is a priority species under the MSHCP.

Project Approach / Methods:

In 1999, the federal and state land and resource managers' Management Oversight Group formally adopted line distance sampling as the method used on public lands in California, Nevada, Arizona, and Utah to monitor desert tortoise populations. Line distance sampling for desert tortoises includes the following components:

Line distance sampling transects to estimate visible and above-ground tortoise numbers

Line distance sampling (Buckland et al. 2001) estimates tortoise density by combining information on 1) the number of tortoises seen in each kilometer walked, 2) how the number of tortoises detected decreases with distance from the transect line, and 3) the proportion of tortoises not above ground and detectable. The initial protocol for range-wide desert tortoise monitoring project was developed by Anderson and Burnham (1996).

Transects are conducted by 2-person crews. They scan for tortoises while walking in a straight line on a specified compass bearing. One 12-km transect is completed each day by each crew. The number of transects in each sampled area is planned to achieve the desired precision (USFWS 2006). Sampling areas outlined in Appendix 1 contribute to density estimates in the associated Recovery Unit (USFWS 1994); monitoring results are designed to yield recovery unit level description of changes in tortoise densities over time. Areas of Clark Co. are in the Northeast Mojave and Eastern Mojave Recovery Units and include approximately 350 transects. Freeware software (DISTANCE; Thomas et al. 2006), is used to estimate density.

Radio telemetry to estimate non-visible, below-ground tortoise numbers

Tortoises in deep burrows or well-hidden in dense vegetation cannot be detected by walking transects. In order to estimate proportion of the population that cannot be detected visually, transmittered tortoises are established in sites throughout tortoise habitat. There are 2 such sites in Clark County in the Piute/Eldorado and Coyote Springs Desert Wildlife Management Areas. These tortoises can be detected with a radio receiver even if they are not visible. A daily record is made of whether each animal was visible or not, and this is used to calculate the proportion detectable. Final density estimates are corrected with this information.

Training field crews

Transect sampling each year is preceded by 2 weeks of training for all personnel who collect data (USFWS 2008). Topics include the theory of line distance sampling, methods for collecting transect data, and natural history of desert tortoises. Most days, however, are spent conducting practice transects on testing lines and in open desert near Jean, Nevada.

Data management and quality assurance

This project involves simultaneous collection of data on paper and electronic forms. Data management for this project involves developing data collection software and forms, developing error-checking software, error-checking at the field contractor, database validation, and final database development.

Estimated Project Cost:

\$1,840,000

For Information Gathering/Research-Related Projects: Does this project address a priority goal, objective or information gap in one of the listed planning document?

May 1, 2006 Adaptive Management Report for the Clark County, Nevada MSHCP

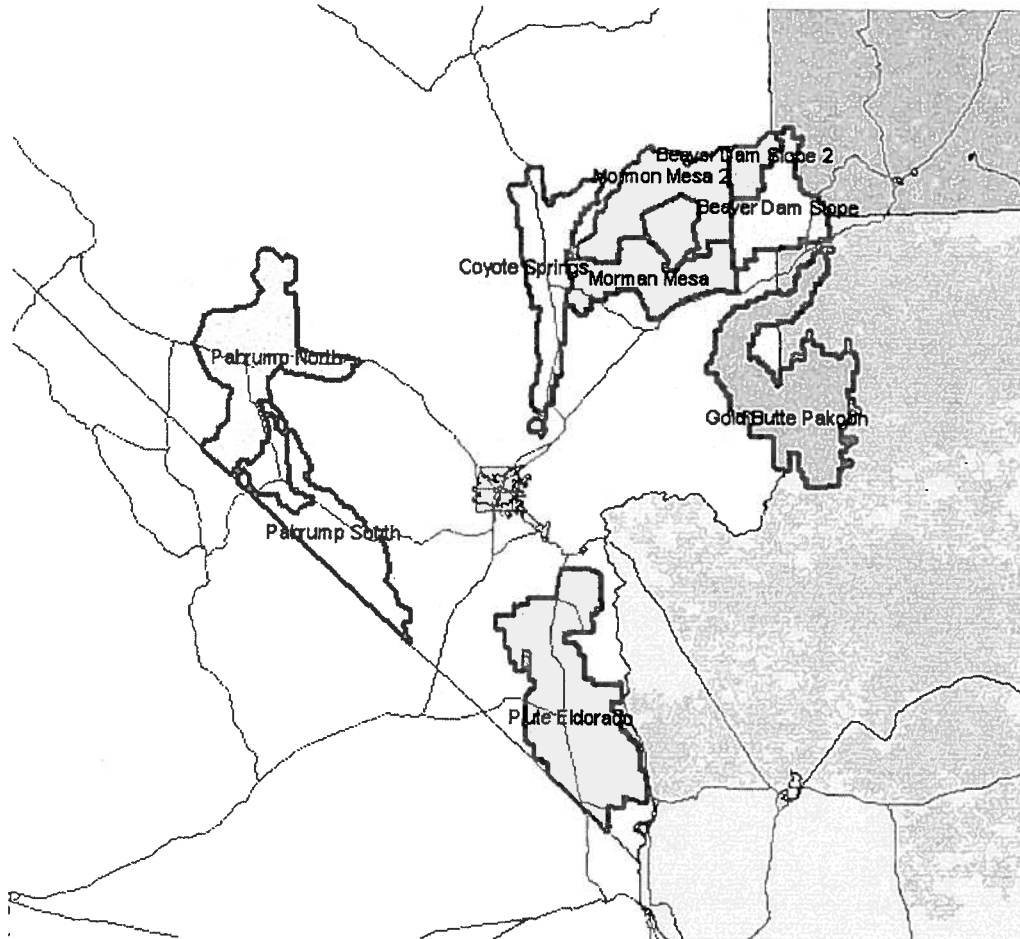
- ❖ **Species risk analysis (Appendix G)**
The desert tortoise falls within the highest priority for filling knowledge gaps, especially with regard to population status and trend.

June 2000 MSHCP and EIS

- ❖ **Section 2.1.6 Species**
The desert tortoise, *Gopherus agassizii*, is a covered species. Page 2-8 calls for maintaining stable or increasing numbers of covered species. This project will allow description of desert tortoise population trends.
- ❖ **Section 2.2.2.4.a. Regulatory Framework: Recovery Plans: Desert Tortoise (Pages 2-26 and 2-27)**
"It is the goal of the Clark County DCP and MSHCP to accomplish the five targets [*recovery criteria, including a positive population trend*] stated above such that tortoise populations in the recovery units recommended in Clark County can be delisted ..." This project contributes directly to the first target.
- ❖ **Appendix B Individual Species Analyses p B75**
Notes that the Adaptive Management Plan should include monitoring of desert tortoise populations to determine if populations are progressing toward recovery.

Citations/Literature List (Attached as Attachment 2)

Attachment 1: Map of the project area.



Citations/Literature List

Anderson, D.R., K.P. Burnham, B.C. Lubow, L. Thomas, P.S. Corn, P.A. Medica, and R.W. Marlow. 2001. Field trials of line transect methods applied to estimation of desert tortoise abundance. *Journal of Wildlife Management* 65:583-597.

Anderson, D.R., and K.P. Burnham. 1996. A monitoring program for the desert tortoise. Report to the Desert Tortoise Management Oversight Group.

Buckland, S.T., D.R. Anderson, K.P. Burnham, J.L. Laake, D.L. Borchers, and L. Thomas. 2001. *Introduction to Distance Sampling: Estimating Abundance of Biological Populations*. Oxford Univ. Press, Oxford. 432 pp.

Heaton, JS, R Marlow, R Patil, E Aldrich, PS Corn, K Nussear, P Medica, L Allison. 2008. 2008 Desert Tortoise Population Monitoring Handbook. University of Nevada, Reno. Reno, Nevada.

Thomas, L., Laake, J.L., Strindberg, S., Marques, F.F.C., Buckland, S.T., Borchers, D.L., Anderson, D.R., Burnham, K.P., Hedley, S.L., Pollard, J.H., Bishop, J.R.B. and Marques, T.A. 2006. *Distance 5.0. Release 5.0. Research Unit for Wildlife Population Assessment*, University of St. Andrews, UK. <http://www.ruwpa.st-and.ac.uk/distance/>

[USFWS] U.S. Fish and Wildlife Service. 2006. *Range-wide Monitoring of the Mojave Population of the Desert Tortoise: 2001-2005 Summary Report*. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada.

**Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Project Concept Summary Form: 2009-2011 Biennium
March 28, 2008**

Project Name:

Gypsum Habitat Restoration Methods and Associated Species Research for Lake Mead National Recreation Area (National Park Service)

Location of activities, MSHCP Management Area (IMA/LIMA/MUMA/UMA) and land manager/owner (8.5x11 map attached as Attachment 1):

This project will be implemented within the Clark County portions of Lake Mead National Recreation Area (NPS) and selected adjacent Bureau of Land Management (BLM) areas containing gypsiferous soils and dependent species. While assessment and monitoring activities will occur in both areas, manipulative treatments and ground disturbing activities will occur only on NPS lands. Lake Mead NRA is designated an Intensively Managed Area (IMA). Bureau of Land Management project locations are variously designated as IMA, LIMA (Less Intensively Managed Area), and ACEC (Area of Critical Environmental Concern).

Project Goal:

This project will help protect, maintain, and manage gypsiferous soils habitats and promote long-term survival and viability of populations of species of concern in Clark County associated with these habitats by exploring seed bank attributes and developing restoration methods.

Project Description and Anticipated Benefit:

In extreme environments, it is not uncommon for many plant species to exist in greater numbers below ground in the seed bank than above ground as seedlings or reproducing plants. Many of today's most pressing vegetation management concerns in the Mojave Desert, such as rare plant conservation and exotic plant management, center on the abundance, composition, and distribution of seeds. Recognizing this, the 2006 MSHCP Adaptive Management Report (AMR) recommends beginning seed monitoring programs for targeted rare plant species. The Nature Conservancy's conservation management strategy (CMS) for two gypsophiles, Las Vegas bearpoppy (*Arctomecon californica*) and sticky ringstem (*Anulocaulis leiosolenus* var. *leiosolenus*), recommend seed bank studies as well. According to the CMS, "nesting sites and nectar plants for poppy pollinators are complete unknowns" and there is "no documentation of mitigation success". In addition, the CMS identifies several baseline information gaps common to many species; a few of them are reproductive biology, pollinator ecology, seed bank research, effects of fire and invasive plant species, and effective restoration techniques. Furthermore, the need for study into fragmentation effects, especially on seed distribution and pollinators, is crucial. The CMS states that "even large populations are at risk due to environmental stochasticity", and Hickerson (1998) suggests the need for additional patch establishment. Lake Mead NRA contains several areas that may be suitable habitat for rare plants (particularly Las Vegas bearpoppy), but do not contain them at the present time. The existing Lake Mead NRA Las Vegas bearpoppy populations have been documented by the CMS as having the most intact pollinator assemblage in Clark County, which may facilitate and enhance success of any reintroduction efforts attempted.

Several plant species of concern to Clark County will directly benefit from this research: Las Vegas bearpoppy, sticky ringstem, Las Vegas buckwheat (*Eriogonum corymbosum* var. *nilesii*),

and sunray (*Enceliopsis argophylla*). Many other associated species will indirectly benefit from increased habitat integrity and health. Methods and information developed by this project will be directly transferable to other land management agencies with comparable gypsiferous habitat management concerns.

Project Approach / Methods:

Because many of the highest recommendations of the CMS are already being researched (randomized surveys, range, extent, distribution, etc.) this project will address several other recommendations and information gaps described in the above management documents. *Ex situ* germination of many species (particularly Las Vegas bearpoppy) has been problematic in the past, so we will concentrate mainly on field manipulations for most enhancement experiments. Following standard ecological methodology, seed budget development will include measure of soil seed banks, seed production and dispersal, and seed fates for the entire plant community at the selected sites. Specific actions include the following:

- Thorough literature review of all existing published research and grey literature available
- Develop seed budgets (including exotic plants) for at least 10 geographically distinct sites in gypsiferous habitats that currently contain rare plants
- Develop seed budgets (including exotic plants) for at least 10 geographically distinct sites in gypsiferous habitats that historically have had but do not currently contain rare plants
- Determine germination requirements for all gypsiferous perennial plant species
- Explore ways to enhance or advance loss of seed coat or morphological dormancy in rare plants
- Explore ways to increase pollination and seed set success in rare plants
- Explore pollinator ecology, especially in adjacent non-gypsum habitats that function as alternative support for pollinators
- Explore ways to introduce rare plants on suitable but currently uninhabited sites
- Explore and document disturbance mitigation methods, particularly topsoil salvage and replacement
- Thorough documentation and publication of all results and methods

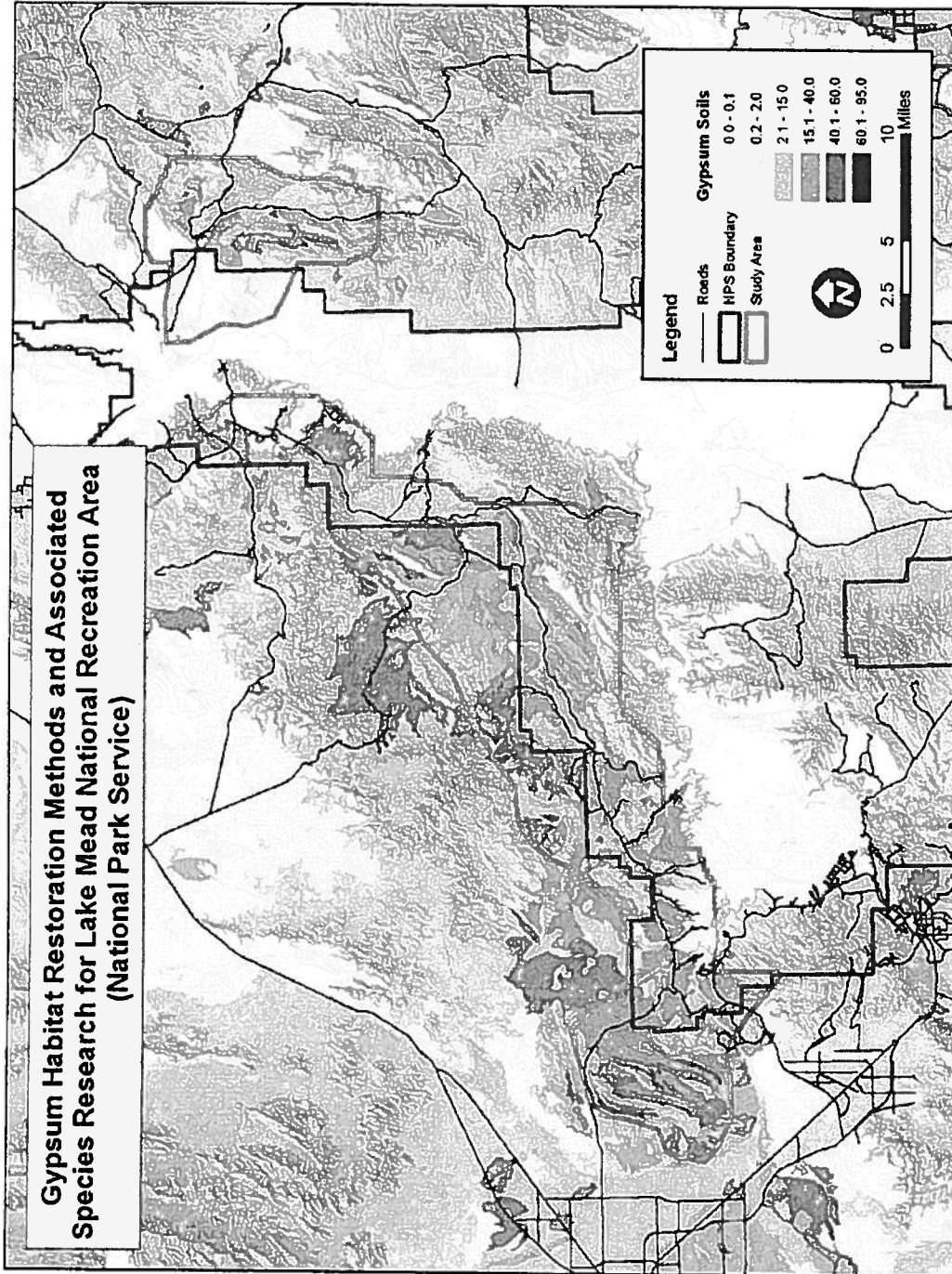
Estimated Project Cost:

Estimated project cost for two years is \$340,000. It includes part-time Principal Investigator, two full-time research assistants, all restoration/outplanting supplies (including plant propagation and research), greenhouse/nursery use, transportation, data management, miscellaneous equipment, and overhead.

For Information Gathering/Research-Related Projects: Does this project address a priority goal, objective or information gap described in a Conservation Management Strategy, Assessment, Conservation Agreement or other planning document?

This project addresses priority goals in both The Nature Conservancy's *A Conservation Strategy for Nine Low Elevation Rare Plants in Clark County, Nevada* (pages 45 and 64) and Clark County's *2006 Adaptive Management Report for the Clark County, Nevada Multiple Species Habitat Conservation Plan* (pages 93 and 108) as described in the above paragraphs.

Map of Locations (Attachment 1)



Citations/Literature List (Attachment 2)

- Clark County, Nevada. 2006. Adaptive Management Report for the Clark County, Nevada Multiple Species Habitat Conservation Plan. Unpublished report from Clark County, Nevada as Plan Administrator to US Fish and Wildlife Service. 116 pp.
- Hickerson, L.L., and P.G. Wolf. 1998. Population and genetic structure of *Arctomecon californica* Torr. & Frémont (Papaveraceae) in fragmented and unfragmented habitat. *Plant Species Biology* 13:21-33.
- The Nature Conservancy. 2007. A Conservation Strategy for Nine Low Elevation Rare Plants in Clark County, Nevada. Unpublished report from The Nature Conservancy to Clark County, Nevada. 390 pp.

**Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Project Concept Summary Form: 2009-2011 Biennium**

Project Name:

Mesquite and Acacia Woodland Assessment, Monitoring, Restoration and Management for Lake Mead National Recreation Area (National Park Service)

Location of activities, MSHCP Management Area (IMA/LIMA/MUMA/UMA) and land manager/owner (8.5x11 map attached as Attachment 1):

This project will be implemented within the Clark County portions of Lake Mead National Recreation Area (NPS) and selected adjacent Bureau of Land Management (BLM) areas containing mesquite/acacia woodland. While assessment and monitoring activities will occur in both areas, manipulative treatments and ground disturbing activities will occur only on NPS lands. Lake Mead NRA is designated an Intensively Managed Area (IMA). Bureau of Land Management project locations are variously designated as IMA, LIMA (Less Intensively Managed Area), and ACEC (Area of Critical Environmental Concern). No activities for this project will take place in areas within the current Las Vegas Disposal Boundary.

Project Goal:

This project will develop and implement a strategy for protecting and managing mesquite/acacia woodlands in Lake Mead National Recreation Area; promote long-term survival and regeneration of these woodlands; and in turn continue to maintain important habitat and resources used by many species of concern in Clark County.

This project does not determine individual patch suitability as habitat for any particular animal species, but it will measure several key indicators, such as mistletoe abundance, known to affect habitat quality for species such as phainopepla (*Phainopepla nitens*; Crampton et al. 2006).

Project Description and Anticipated Benefit:

Mesquite and acacia woodlands in Clark County are comprised of, but not limited to, three dominant species: honey mesquite (*Prosopis glandulosa* var. *torreyana*), screwbean mesquite (*Prosopis pubescens*), and catclaw acacia (*Acacia greggii*). These woodlands are of significant biological importance to several animal species covered under the Clark County Multiple Species Habitat Conservation Plan (Clark County 2006), including phainopepla, vermilion flycatcher (*Pyrocephalus rubinus*), several species of lizards, and the sidewinder (*Crotalus cerastes*). However, many woodland patches in Clark County have been destroyed by or are being threatened by developments such as housing, mining, and agricultural conversion. The remaining patches, even if protected from direct loss by development, are at risk of degradation through associated human activities such as livestock grazing, off-road vehicle activity, poaching for firewood, dumping, permitted woodcutting, and groundwater withdrawals (Crampton et al. 2006; Craig and Abella 2008). Woodland patch integrity and health are also at risk from wildland fire and exotic species invasion including red brome and tamarisk (Crampton et al. 2006).

This project will implement several management actions recommended in the March 2006 *Conservation Management Strategy for Mesquite and Acacia Woodlands in Clark County, Nevada* (CMS). The metapatches described as Las Vegas Bay, Sunrise, Muddy Mtns., Rogers Spring, Overton, SR165W, Cottonwood, Nelson, Empire, Grapevine, Hiko, and Gold Butte SW

are the focus of this project. These patches alone cover a major geographic area across lands administered by both agencies, but additional patches may be included in the project as appropriate if resources allow. It will use the best available scientific information and expertise to assess overall patch health, plant community composition, and threats to existing individual mesquite/acacia woodland patches; develop woodland restoration and/or enhancement methods; and develop a monitoring system with management action triggers to ensure long-term quality habitat for associated species. Methods developed here will be directly transferable to other land management agencies with comparable mesquite/acacia woodland management concerns.

Project Approach / Methods:

The CMS describes several data or knowledge gaps that hamper conservation efforts crucial to sustaining the ecological integrity of mesquite/acacia woodlands in Clark County. Among these are: extent and cause of lack of mesquite and acacia recruitment; factors that promote successful restoration of mesquite and acacia; and determination of effects of threats to woodlands and associated species. In addition, three GIS coverage gaps are identified: surveying and mapping of areas previously identified; potential habitat should be groundtruthed; and the structure and condition of all woodlands in the spatial dataset should be assessed for the degree of mistletoe infection and human use patterns. This project will address these knowledge gaps by implementing the following actions in the areas shown on the map in Attachment 1:

- Review information on existing patches described in the CMS and groundtruth for accuracy
- Locate additional patches over .4 hectare (1 acre) in size using remote-sensing methods (Quickbird) with subsequent groundtruthing
- Characterize all patches with regards to recruitment, survival, tree attributes (height, diameter, growth form, and density), associated plant community, mistletoe abundance, evidence of recent fire, and other relevant factors outlined in the CMS
- Describe potential threats to each patch and determine long- and short-term effects on patch integrity
- Develop restoration methods to promote woodland health, integrity and distribution
- Establish long-term monitoring plots in selected woodlands and determine management action triggers
- Thoroughly document and publish all methods and results

Estimated Project Cost:

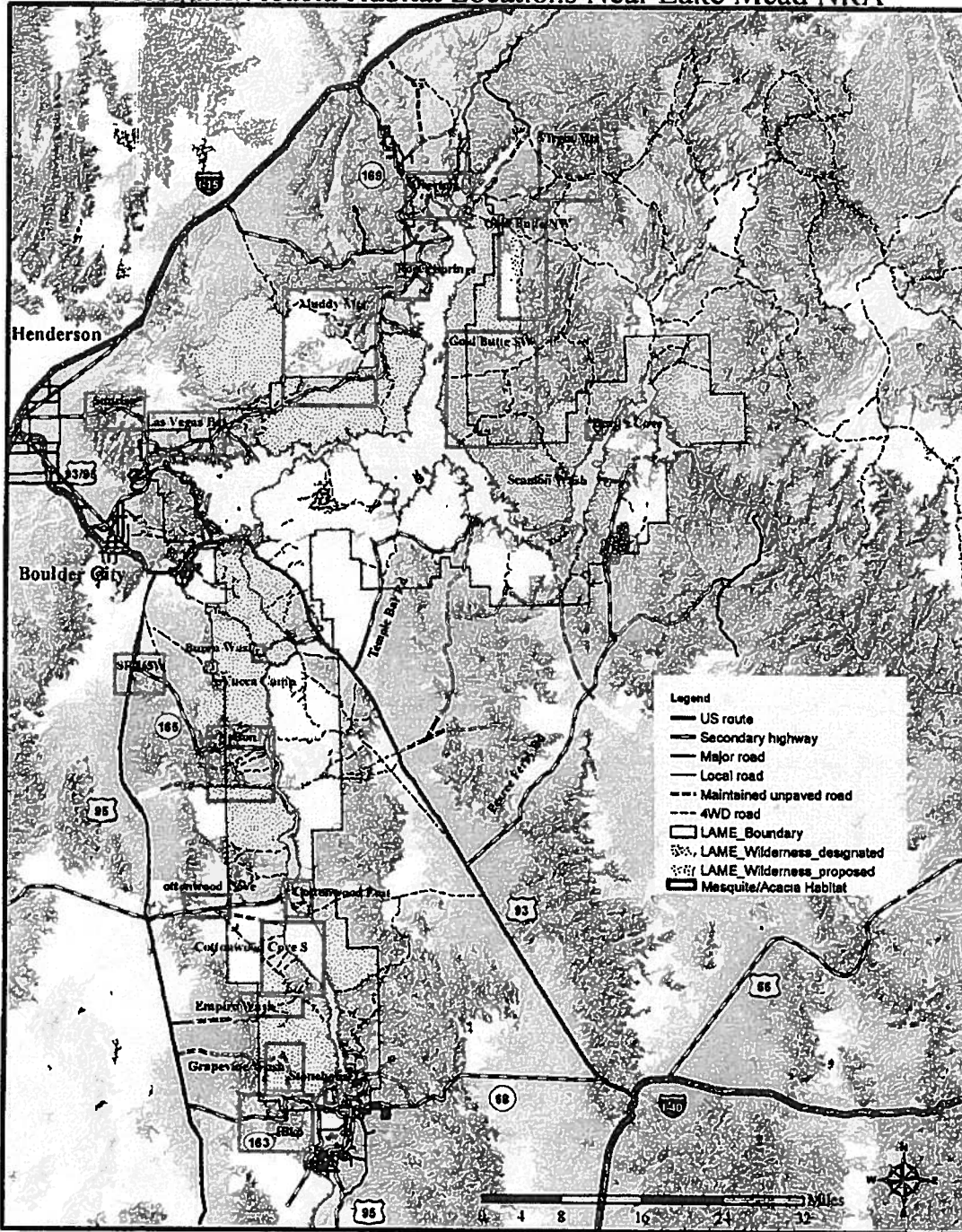
Estimated project cost for two years is \$290,000. It includes part-time Principal Investigator, two full-time research assistants, all restoration/outplanting supplies (including plant propagation), transportation, data management, miscellaneous equipment, and overhead.

For Information Gathering/Research-Related Projects: Does this project address a priority goal, objective or information gap described in a Conservation Management Strategy, Assessment, Conservation Agreement or other planning document?

This project addresses several data and knowledge gaps described in the *2006 Conservation and Management Strategy for Mesquite and Acacia Woodlands in Clark County, Nevada*, particularly those to do with lack of recruitment, spatial characteristics and mistletoe abundance (pages 34-36). In addition, this proposal will help implement several conservation actions for Ecosystem/Habitat Threats (grazing 701, 702, 703; woodcutting 1001, and exotic species 1501) outlined in the MSHCP (Clark County 2006).

Map of Project Locations (Attachment 1)

Mesquite/Acacia Habitat Locations Near Lake Mead NRA



Citations/Literature List (Attachment 2)

Clark County. 2006. Adaptive Management Report for Clark County, Nevada Multiple Species Habitat Conservation Plan. Unpublished report from Clark County to U.S. Fish and Wildlife Service. Available at http://www.accessclarkcounty.com/dagem/epd/desert/dcp_reports.html

Craig, J.E., and S.R. Abella. 2008. Vegetation of grassy remnants in the Las Vegas Valley, southern Nevada. Desert Plants (in press).

Crampton, L., J. Krueger, and D. Murphy. 2006. Conservation management strategy for mesquite and acacia woodlands in Clark County, Nevada. Unpublished report submitted to Bureau of Land Management, Las Vegas Field Office, Las Vegas, NV. 151 pp.

**Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Project Concept Summary Form: 2009-2011 Biennium
Due: March 28, 2008**

Project Name: OHV education

Location of activities, MSHCP Management Area (IMA/LIMA/MUMA/UMA) and land manager/owner (8.5x11 map attached as Attachment 1):

BLM managed lands within Clark County identified as IMA, LIMA, and MUMA. With concentrated efforts on high use locations including: Nellis Dunes, Jean/Roach Special Recreation Management Area, Logandale Trails, the edges of the Las Vegas Valley, and within conservation areas (IMA and LIMA) including desert tortoise ACECs.

Project Goal:

Reduce habitat degradation and direct take resulting from illegal use of OHVs on mitigation lands.

Project Description and Anticipated Benefit:

In appropriate use of Off Road Vehicles (OHV) is a major cause of new habitat disturbance in southern Nevada. An educational campaign is needed to inform the public about legal use of their recreational vehicles to reduce future habitat degradation and loss of mitigation investments made by the Desert Conservation Program and the federal agencies. This project would make strides to inform the public through production and distribution of educational materials in partnership with local and state agencies and businesses and through outreach in areas where OHVs are used.

Benefits: Reduced take of priority species' and priority impacted species' and degradation of their habitats in IMAs, LIMAs and MUMAs, reduced take of reduced take of tortoises on unpaved roads and trails, increased public compliance, reduction in restoration costs over time, and better stewardship of public lands.

Priority Species that are Anticipated to Benefit

COMMON NAME	SCIENTIFIC NAME
yellow-billed cuckoo	<i>Coccyzus americanus</i>
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>
desert tortoise	<i>Gopherus agassizii</i>
Las Vegas bearpoppy	<i>Arctomecon californica</i>
Las Vegas buckwheat	<i>Eriogonum corymbosum</i> var. <i>nilesii</i>
sticky buckwheat	<i>Eriogonum viscidulum</i>
white-margined beardtongue	<i>Penstemon albomarginatus</i>

Project Approach / Methods:

Three types of educational materials would be produced (displays, brochures and TV spots) explaining appropriate use of OHVs in Clark County (tread lightly, speed limits on unpaved

roads, only using existing roads and trails, etc.). The information would be disseminated in the following ways:

- Respect, Protect and Enjoy Channel 4 TV spots would be produced incorporating BLM OHV recreation strategies and highlighting BLM employees.
- Displays would be placed in locations with high visitor traffic like DMV offices, museums, and state and local government offices. The displays would take advantage of locations where the public must wait for services or information.
- Project staff would work with businesses like OHV sales and repair shops, ATV tour and training providers, and drivers training instructors to distribute brochures.
- A two-person team would be hired/contracted to provide outreach to the public at high use locations including Nellis Dunes, Jean/Roach Special Recreation Management Area, Nelson Hills/Eldorado Special Recreation Management Area, Logandale Trails, the edges of the Las Vegas Valley, and within conservation areas (IMA and LIMA) including desert tortoise ACECs.

Estimated Project Cost:

Total: \$350,000:

Printing: \$75,000

TV spots: \$100,000

Personnel: \$145,000

Vehicles, gas: \$30,000

For Information Gathering/Research-Related Projects: Does this project address a priority goal, objective or information gap described in a Conservation Management Strategy, Assessment, Conservation Agreement or other planning document?

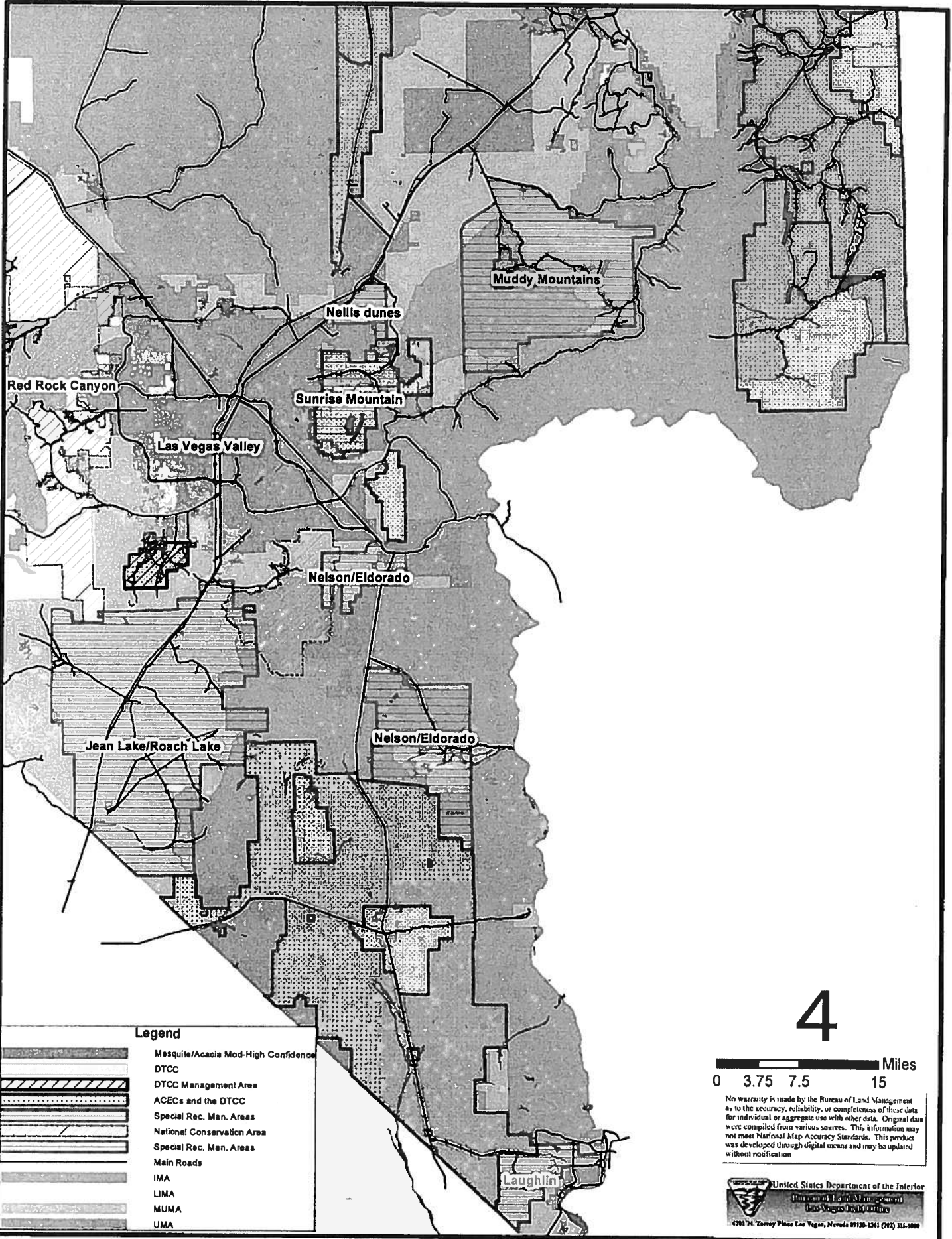
This project addresses priority objectives in all six conservation management strategies.

Low Elevation Rare Plants Conservation Management Strategy (2007) Objective 2: Manage viable populations of sticky ringstem, Las Vegas bearpoppy, white bearpoppy, threecorner milkvetch, sticky wild buckwheat, white-margined beardtongue, and Parish phacelia in IMAs, LIMAs and MUMAs by removing significant casual OHV impacts by 2020. (p. 183)

Conservation Management Strategies for Coyote Springs, Gold Butte, Mormon Mesa, and Piute-Eldorado DWMA (2007), Shared Objective 1: Recovery and delisting of the desert tortoise, which can occur only after the following criteria have been met:...the habitat within a Recovery Unit must be able to sustain or be managed to sustain a long-term viable tortoise population...Regulatory mechanisms or land management practices that provide long-term protection for desert tortoises must be implemented within the Recovery Unit. Conservation Actions: BLM 5, USFWS 2, NPS 1, USFWS 1, USFS 12 (see pp. 54, 57, 59, 63 in the Mormon Mesa DWMA CMS).

Mesquite and Acacia Conservation Management Strategy (2006) Objective 1: The largest and most biologically significant woodlands should be protected from habitat loss and degradation, and/or restored to the conditions listed in Objectives 2-7, General Conservation Action 5: Reduce deleterious human activity in woodlands (e.g. increase law enforcement, reduce access, limit OHV use, mining and grazing). (pp. 82-83)

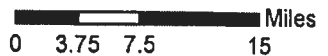
Citations/Literature List (Attached as Attachment 2)



Legend

	Mesquite/Acacia Mod-High Confidence
	DTCC
	DTCC Management Area
	ACECs and the DTCC
	Special Rec. Man. Areas
	National Conservation Area
	Special Rec. Man. Areas
	Main Roads
	IMA
	LIMA
	MUMA
	UMA

4



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Attachment 2

Citations/Literature List

- Clark County, Nevada. 2007. *Conservation Management Strategy Coyote Springs Desert Wildlife Management Area.*
- Clark County, Nevada. 2007. *Conservation Management Strategy Gold Butte Desert Wildlife Management Area.*
- Clark County, Nevada. 2007. *Conservation Management Strategy Mormon Mesa Desert Wildlife Management Area.*
- Clark County, Nevada. 2007. *Conservation Management Strategy Piute Eldorado Desert Wildlife Management Area.*
- Crampton, Lisa, J. Krueger, D. Murphy. 2006. *Conservation Management Strategy for Mesquite and Acacia Woodlands in Clark County.*
- Nature Conservancy, The. 2007. *A Conservation Management Strategy for Nine Low Elevation Rare Plants in Clark County, Nevada.*

**Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Project Concept Summary Form: 2009-2011 Biennium
Due: March 28, 2008**

Project Name: Relict Leopard Frog Conservation

Location of activities, MSHCP Management Area (IMA/LIMA/MUMA/UMA) and land manager/owner (map attached as Attachment 1): This project will be conducted within the proposed management zone for the Relict Leopard Frog (*Rana onca*) as identified in the Conservation Assessment and Strategy (CAS) for this species (Relict Leopard Frog Conservation Team 2005). Activities will focus on streams and springs in areas adjacent to the Colorado, Virgin, and Muddy Rivers on lands managed by the National Park Service (NPS) within the Lake Mead National Recreation Area (LMNRA) and on adjacent Bureau of Land Management (BLM) lands. The majority of these lands are classified as intensively managed areas (IMA).

Project Goal: To ensure the continued persistence of existing natural Relict Leopard Frog populations and to establish new populations in a diversity of locations. This project will implement conservation actions and continue conservation planning as stipulated in the federally sanctioned CAS.

Project Description and Anticipated Benefit: The Relict Leopard Frog meets the criterion as a priority covered species in that listing under the federal Endangered Species Act (ESA) appears imminent unless conservation measures are implemented to assure its survival and recovery (MSHCP section 2.4.2.4 C). Following population declines and range contraction through 2001, small natural populations now exist only in a few sites within two general areas, Black Canyon and the Northshore springs complex, both within Clark County (Jaeger et al. 2001; Bradford et al. 2004). In 2003, this frog was petitioned for listing under the ESA. Listing did not occur at that time on the basis of development of the CAS, analysis of associated data, and CAS efforts underway. The CAS was coordinated by the NPS under its mandate to develop and implement a management plan for this species [MSHCP section 2.8.7.7, NPS(54)]. Although, experimental populations have been established (some with promising results), a substantial decline in the largest known population occurred in 2006 following storm caused debris-flows in Black Canyon (NPS unpublished data; J. Jaeger pers. obs.). Other recent declines at Northshore spring sites were concomitant with burro reductions, burros cause moderate levels of disturbance along these streams which kept emergent vegetation from choking preferred frog habitats (Bradford et al. 2004; Harris and Jaeger 2006).

Under the CAS, numerous management actions are identified (see step-down, pages 55-62). The following summarizes actions that will be conducted under this proposed project:

- monitoring the status of natural populations;
- effectiveness monitoring of experimental populations – to assess success/status of translocations;
- management of a headstarting program and facilities to provide animals to augment existing populations (as needed) and to establish additional experimental populations;
- coordinate actions to identify and assess potential sites for additional translocations;
- coordinate and conduct habitat management activities (e.g., vegetation management) at natural and experimental sites to protect and enhance frog habitat;
- assess the effectiveness of habitat management actions;
- provide administrative support to the Relict Leopard Frog Conservation Team to facilitate planning, adaptive management, and reporting of management actions.

The anticipated benefits from this project will be the persistence of natural Relict Leopard Frog populations, expansion of populations to new sites, and assessment of management actions to inform

adaptive management. These efforts are intended to meet CAS goals providing for the preservation of this species.

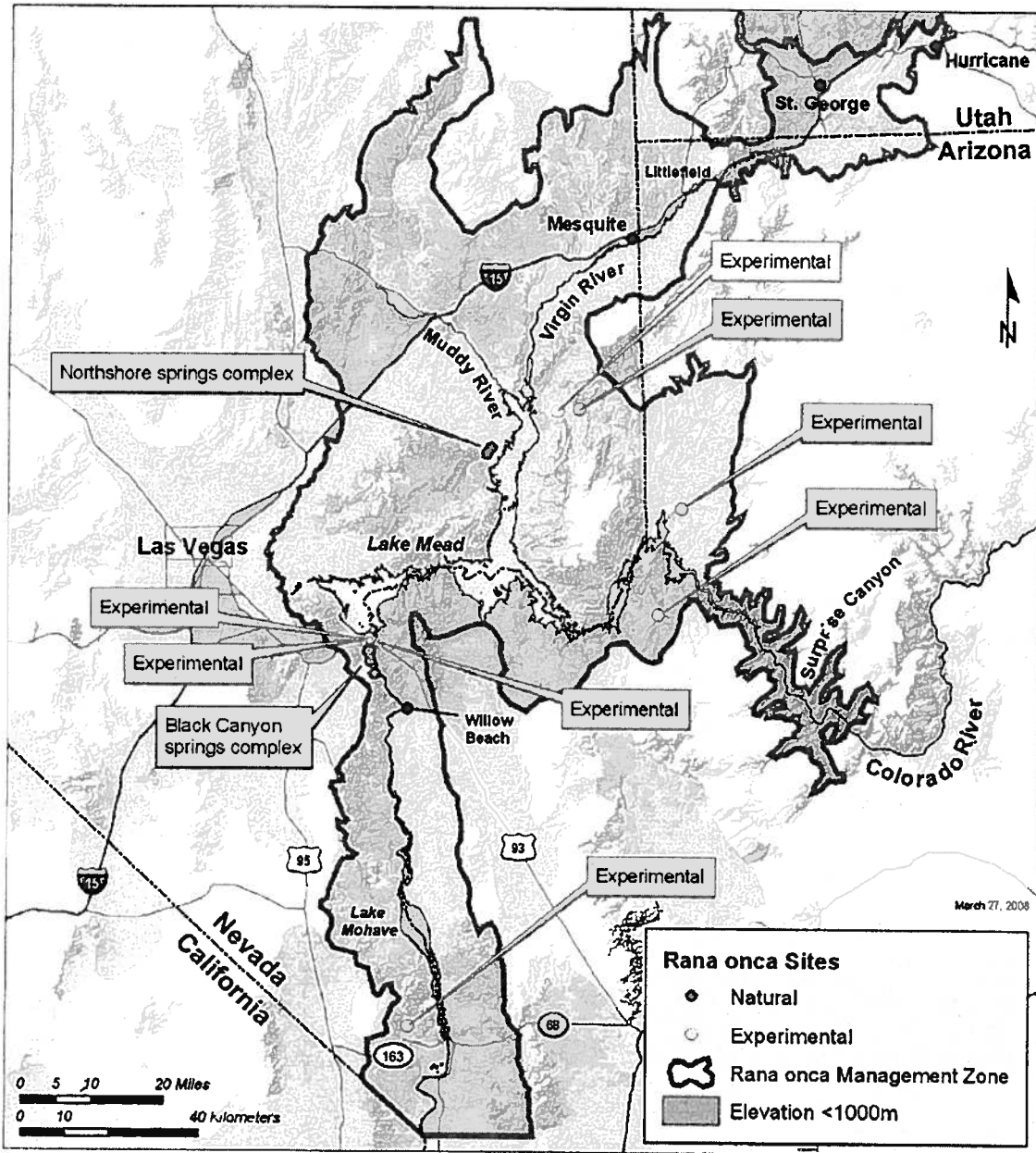
Project Approach / Methods: The major approaches for this project will be headstarting-translocation and monitoring-assessment. Current protocols are outlined in the CAS. In general, for headstarting-translocations, egg masses will be collected from the wild, reared to tadpole and young frog stages, and then released to targeted sites. Rearing facilities will be maintained at LMNRA and Willow Beach National Fish Hatchery. Criteria for assessing potential translocation sites are also described within the CAS, unfortunately suitable sites are limited. Personnel under this project will work with other agency biologists to identify, assess, permit, and potentially improve new translocation sites.

Both nocturnal and diurnal Visual Encounter Surveys (Crump and Scott 1994) will be used to assess the status of populations. Surveys will be conducted in the spring and fall by teams consisting of at least one anuran field biologist. Experimental habitat management activities are currently being conducted at Northshore spring sites, which include mechanical reduction and controlled burning of dense vegetation, and creation of fish-free breeding pools (Jaeger 2007). Recommendations from this experimental effort, including continued vegetation manipulations, will be implemented to improve and maintain habitat and increase population sizes. Momentum is moving towards eradication of exotic fish from sections of Blue Point Spring (an action that should also benefit an endemic spring snail). Fish-free habitat will be maintained and the effectiveness of the management actions on population trends assessed. Current efforts to document population responses have suffered from extremely small population sizes, but with time, trends should become apparent. Mark-recapture studies using PIT tag methods (see Bradford et al. 2004; Jaeger 2007) will be conducted at the Northshore spring sites to determine population trends.

Estimated Project Cost: \$270,000. This estimate is roughly based on the cost of the current management effort for two years. It includes: part-time principle investigator and field personnel, data management, transportation, rearing facilities maintenance, minor equipment, and overhead.

For Information Gathering/Research-Related Projects: Does this project address a priority goal, objective or information gap described in a Conservation Management Strategy, Assessment, Conservation Agreement or other planning document? The 2006 Adaptive Management Report (AMR) for the MSHCP (Clark County 2006) failed to acknowledge the synthesis of information developed in the CAS for this species. The CAS addresses all components of a Species Status Report as called for in the AMR; thus, the CAS represents the "best available science" necessary to inform the Desert Conservation Plan. Actions called for in this proposal will provide information necessary to determine and monitor the status and trend of this species (AMR Recommendation Table 5.3.1, 5.3.2 and 5.3.3), and provides effectiveness monitoring of management actions (AMR page 94) to support adaptive management. This species was listed as a High Priority for filling knowledge gaps in the County Species Risk Matrix and as a High Priority in the Risk/Uncertainty Matrix. The project summarized herein has elements that address information needs on threats, habitat requirements, and effectiveness of management options for habitat restoration and translocation. Several species and ecosystem threats identified in the MSHCP (e.g., threats 101, 102, 1501) are addressed, as well as specific MSHCP conservation management actions (NPS-5, 14, 44) that specify inventory, monitoring, and reintroductions actions for the Relict Leopard Frog.

Attachment 1. Map



Potential management zone (PMZ) for the Relict Leopard Frog as identified in the Conservation Assessment and Strategy for this species (Relict Leopard Frog Conservation Team 2005). Shown are the remaining known sites with natural populations (blue) and experimental translocation sites (green).

Attachment 2. Citations/Literature List

Project Name: Relict Leopard Frog Conservation

Bradford, D.F., J.R. Jaeger, and R.D. Jennings. 2004. Population status and distribution of a decimated amphibian, the relict leopard frog (*Rana onca*). *Southwest Naturalist* 49(2): 218-228.

Clark County. 2006. Adaptive Management Report for Clark County, Nevada Multiple Species Habitat Conservation Plan. Unpublished report from Clark County to U.S. Fish and Wildlife Service. Available at http://www.accessclarkcounty.com/daqem/epd/desert/dcp_reports.html

Crump, M.L., and N.J. Scott Jr. 1994. Visual Encounter Surveys. Pages 84-92 in W.R. Heyer, M.A. Donnelly, R.W. McDiarmid, L.C. Hayek, and M.S. Foster, editors. *Measuring and monitoring biological diversity. Standard methods for amphibians.* Smithsonian Institution, Washington and London.

Harris S.M., and J.R. Jaeger. 2006. Evaluation of the Impact of Vegetation Encroachment on Relict Leopard Frog (*Rana onca*) Populations. Unpublished report submitted to Clark County, Multiple Species Habitat Conservation Plan for work performed on project number 2003-NPS-232-P-2004.

Jaeger, J.R. 2007. Habitat Manipulations for Relict Leopard Frogs (*Rana onca*). Unpublished (active) research project under the Clark County, Multiple Species Habitat Conservation Plan. Project number 2005-UNLV-597-P. Information available at http://www.accessclarkcounty.com/Air_Quality/DCPActiveProjects/DCPActiveProjects.htm

Jaeger, J.R., B.R. Riddle, R.D. Jennings, and D.F. Bradford. 2001. Rediscovering *Rana onca*: Evidence for phylogenetically distinct leopard frogs from the border region of Nevada, Utah, and Arizona. *Copeia* 2001: 339-354.

Relict Leopard Frog Conservation Team. 2005. Conservation Agreement and Rangewide Conservation Assessment and Strategy for the Relict Leopard Frog (*Rana onca*). Unpublished document prepared by the Relict Leopard Frog Conservation Team. Available at: <http://www.ndow.org/wild/conservation/frog/leopard/plan.pdf>

**Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Project Concept Summary Form: 2009-2011 Biennium
Due: March 28, 2008**

Project Name: Restoration of desert tortoise and gypsum habitat

Location of activities, MSHCP Management Area (IMA/LIMA/MUMA/UMA) and land manager/owner (8.5x11 map attached as Attachment 1):

BLM managed lands within Clark County identified as IMA, LIMA, MUMA, and UMA.

Project Goal:

Restore habitat degradation resulting from illegal use of OHVs and illegal dumping.

Project Description and Anticipated Benefit:

Restoration of closed routes leading out of the Las Vegas Valley and rural communities into conservation areas supporting desert tortoise and rare plant species. This project would target illegal access into IMAs, LIMAs, and MUMAs including: Red Rock Canyon NCA, Sloan Canyon NCA, Rainbow Gardens ACEC, River Mountains ACEC, Arden Historic ACEC, the Desert Tortoise Conservation Center Management Area, and lands around rural communities, based on priority status.

Benefits: Reduced take of priority species' and priority impacted species' and degradation of their habitats in IMAs, LIMAs and MUMAs, increased public compliance, reduction in restoration costs over time, better stewardship of public lands.

Priority Species

COMMON NAME	SCIENTIFIC NAME
desert tortoise	<i>Gopherus agassizii</i>
Las Vegas bearpoppy	<i>Arctomecon californica</i>
Las Vegas buckwheat	<i>Eriogonum corymbosum</i> var. <i>nilesii</i>
sticky buckwheat	<i>Eriogonum viscidulum</i>

Priority Impacted Species

COMMON NAME	SCIENTIFIC NAME
phainopepla	<i>Phainopepla nitens</i>
blue diamond cholla	<i>Opuntia whipplei</i> var. <i>multigeniculata</i>

Project Approach / Methods:

A minimum of 75 illegal OHV trails and dumpsites would be documented and mapped using GPS. These sites would be submitted to the land management agency for prioritization using criteria including conservation level of the land, proliferation potential, accessibility, feasibility, and public interest. A minimum of 50 sites approved by the land management agency would be treated and a plan developed for these sites addressing how to prevent recurrence of damage. Restoration techniques would use current Mojave Desert restoration practices approved by the land management agency. These may include: planting vertical mulch, seeding, transplanting live plants, ripping compacted soils with a bobcat, recontouring dump sites with a front-end loader, removing trash and large debris by hand or with heavy

equipment, and installing fences or other barriers. Sites that were planted with live material will be watered and maintained until the plants can function on their own.

Estimated Project Cost:

Total: \$300,000:

Restoration crew \$120,000 per year

Vehicles, travel, supplies and materials; \$30,000 per year

For Information Gathering/Research-Related Projects: Does this project address a priority goal, objective or information gap described in a Conservation Management Strategy, Assessment, Conservation Agreement or other planning document?

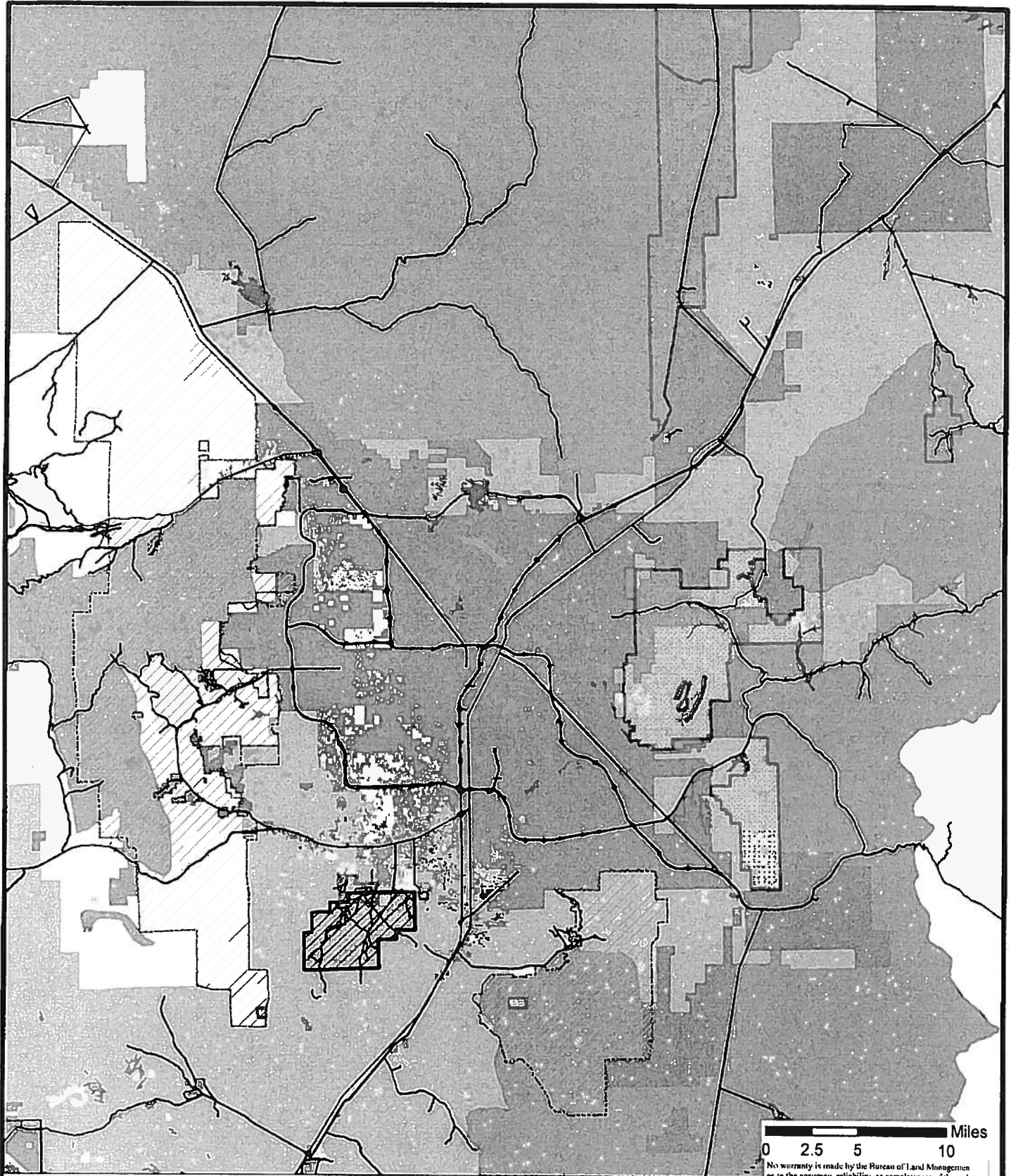
This project addresses priority objectives in all six conservation management strategies.

Low Elevation Rare Plants Conservation Management Strategy (2007) Objective 2: Manage viable populations of sticky ringstem, Las Vegas bearpoppy, white bearpoppy, threecorner milkvetch, sticky wild buckwheat, white-margined beardtongue, and Parish phacelia in IMAs, LIMAs and MUMAs by removing significant casual OHV impacts by 2020.


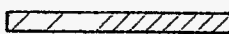




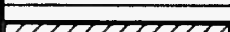




Mesquite and Acacia Conservation Management Strategy (2006) Objective 1: The largest and most biologically significant woodlands should be protected from habitat loss and degradation, and/or restored to the conditions listed in Objectives 2-7, General Conservation Action 5: Reduce deleterious human activity in woodlands (e.g. increase law enforcement, reduce access, limit OHV use, mining and grazing).

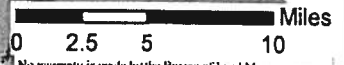
Desert Tortoise (Mojave Population) Recovery Plan (1994) delisting Criteria 2: Enough habitat must be protected within a recovery unit, or the habitat and the desert tortoise populations must be managed intensively enough, to ensure long-term population viability (p.43).

Citations/Literature List (Attached as Attachment 2)



Legend

	Mesquite/Acacia Mod-High Confidence		National Conservation Area
	Main Roads		IMA
	DTCC		LIMA
	DTCC Trail Inventory		MUMA
	DTCC Management Area		UMA
	ACECs and the DTCC		



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4


 United States Department of the Interior
 Bureau of Land Management
 4901 N. Toney Pines Circle, Reno, Nevada 89508-3301 (702) 315-5000

Attachment 2

Citations/Literature List

Crampton, Lisa, J. Krueger, D. Murphy. 2006. *Conservation Management Strategy for Mesquite and Acacia Woodlands in Clark County.*

Nature Conservancy, The. 2007. *A Conservation Management Strategy for Nine Low Elevation Rare Plants in Clark County, Nevada.*

U.S. Fish and Wildlife Service. 1994. *Desert Tortoise (Mojave Population) Recovery Plan.*

**ATTACHMENT 5
Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Draft Ranking Criteria 2009-2011 Biennium**

Project Name: _____

Agency : _____

Criteria	Scoring
1 To what extent does the project mitigate for the direct impact of habitat loss due to development activities in the Las Vegas Valley?	15=Strongly meets the criteria; 1=Does not meet the criteria at all
2 To what extent does the project fit well in the context of the pending incidental take permit and habitat conservation program amendment process?	10=Strongly meets the criteria; 1=Does not meet the criteria at all
3 To what extent does the project benefit federally listed endangered or threatened species, species proposed for federal listing, or designated or proposed state-listed threatened and/or endangered species? (see attached list)	15=Strongly meets the criteria; 1=Does not meet the criteria at all
4 To what extent does the project contribute to the natural resource goals and objectives of one or more formal, ongoing conservation/habitat management plan(s) or effort(s)?	15=Strongly meets the criteria; 1=Does not meet the criteria at all
5 To what extent is the project scientifically credible? Is the project highly recommended by the DCP Science Advisor? Projects should have clearly stated objectives, well-designed procedures and realistically attainable results.	15=Strongly meets the criteria; 1=Does not meet the criteria at all
6 To what extent does the project leverage other/ongoing conservation projects previously funded by the MSHCP?	10=Strongly meets the criteria; 1=Does not meet the criteria at all
7 To what extent does the project increase awareness and/or develop public or stakeholder support for species and habitat conservation in Clark County?	5=Strongly meets the criteria; 1=Does not meet the criteria at all
8 To what extent does the project represent an efficient use of MSHCP funds?	5=Strongly meets the criteria; 1=Does not meet the criteria at all
9 To what extent is the project a discrete action or a programmatic approach to conservation?	5=Strongly meets the criteria; 1=Does not meet the criteria at all
10 To what extent does the proposal address the guidance criteria provided in the project concept summary form (completeness, responsive to the key priorities identified, does not exceed 2 pages, etc.)?	5=Strongly meets the criteria; 1=Does not meet the criteria at all
Total	100 points maximum

Evaluator: _____

ATTACHMENT 6
PERMIT CONDITION/MSHCP EXPLICIT PROJECT CONCEPTS

**Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Permit Condition Project Concept Summary Form: 2009-2011 Biennium
Due: May 28, 2008**

Project Name:

Administration

Location of activities, MSHCP Management Area (IMA/LIMA/MUMA/UMA) and land manager/owner (8.5x11 map attached as Attachment 1):

Not applicable

Project Goal:

The goal of the administration of the Desert Conservation Program (Program) is to implement the Multiple Species Habitat Conservation Plan in a manner that minimizes and mitigates the impacts of take to the maximum extent practicable and to ensure compliance with its associated Incidental Take Permit (TE 034927-0).

Project Description and Anticipated Benefit:

Administration of the Program includes employing a staff of eight (8) permanent, full time equivalent positions to oversee the following operational units of the program: legal, contract/finance/administration, project management, and permit and plan compliance. The DCP requires legal assistance in the areas of open meeting law, contracting and procurement law, real estate law, and compliance with Section 10 of the Endangered Species Act. The District Attorney - Civil Division's Office provides legal counsel to the DCP. The Department of Air Quality and Environmental Management levies a 29.9% overhead charge against the Program partly in order to compensate the DA's Office for this level of support.

The contract/finance/administrative work consists of overseeing the assessment, collection and reporting of mitigation fees collected by the permittees; overseeing the reporting of land disturbance and exempt acres; overseeing the budgeting, accounting, and accounts payable areas of operation; coordinating Southern Nevada Public Lands Management Act assistance agreements and compliance therewith; and overseeing the procurement, contract and agreement management for the Program. The Department of Finance also provides procurement support to the Program. The Department of Air Quality and Environmental Management levies a 29.9% overhead charge against the Program partly in order to compensate the DA's Office for this level of support.

The project management team is responsible for directly carrying out the following mandated projects:

- Boulder City Conservation Easement Management, Maintenance and Law Enforcement
- Desert Tortoise Hotline and Pick-Up Service
- Clark County Fencing Program
- Management of Acquired Properties and Water Rights
- Clark County Public Information and Education Program
- Permit and Plan Amendment

The project management team is also ultimately responsible for the outcome and quality of the discretionary Implementing Agency projects approved in the Implementation Plan and Budget. The project management team is responsible for communication with related project stakeholders and for identifying, resolving or escalating important project-related issues, and managing the risks and contingencies related to the project.

Finally, the Program maintains a position dedicated to ensuring compliance with state and federal permits associated with state and federally-listed species. The area of work focuses on compliance tracking and reporting as outlined in the MSHCP.

The Program Management Analysis (Kirchoff 2005) found that the County, as Plan Administrator, was inadequately staffed for the scope, scale and complexity of the MSHCP. The County intends to ensure the staffing capacity and skill sets necessary are available to responsibly implement and comply with the MSHCP.

Project Approach / Methods:

Administration of the Program will be done in accordance with the MSHCP, Incidental Take Permit and Clark County policy, procedure and practice.

Estimated Project Cost:

\$2,053,617

Specific Incidental Take Permit Condition Addressed by this Concept:

Permit Condition H, "The Permittees shall carry out the minimization, mitigation, and monitoring measures specified in Section 2.8 of the MSHCP..."

2.1.8.2 Clark County Measures to Minimize and Mitigate the Impacts of Take includes the following bullet, "Administration of the MSHCP."

**Clark County Multiple Species Habitat Conservation Plan
Administration Project Concept
Budget Detail**

Fund	Fund Center	Commitment Number	Commitment Item Name	2009 - 2010 Budget	2010 - 2011 Budget	2009-2011 Biennium Budget	Notes
2360			Salaries	\$ 423,417.35	\$ 450,914.00	\$ 874,331.35	This is for the 7 full time permanent positions and 2 part time positions assigned to the program
2360			Benefits	\$ 127,500.00	\$ 138,550.00	\$ 266,050.00	This is for the 7 full time permanent positions and 2 part time positions assigned to the program
2360	1300215020	640340	R & M Vehicles	\$ 1,700.00	\$ 1,700.00	\$ 3,400.00	Two vehicles, rental from county pool no longer necessary
2360	1300215020	641000	Other Rental Expenses	\$ 106,250.00	\$ 106,250.00	\$ 212,500.00	Office Space, meeting rooms (\$7,800/month for rent, \$12650 for misc rental)
2360	1300215020	663400	Office Supplies	\$ 10,200.00	\$ 10,200.00	\$ 20,400.00	
2360	1300215020	648100	Printing & Reproduction	\$ 8,500.00	\$ 8,500.00	\$ 17,000.00	
2360	1300215020	649510	Training/Travel	\$ 34,000.00	\$ 34,000.00	\$ 68,000.00	
2360	1300215020	663610	Computer & Supplies	\$ 42,500.00	\$ 42,500.00	\$ 85,000.00	
2360	1300215020	679800	Returns	\$ 17,000.00	\$ 17,000.00	\$ 40,000.00	
2360	1300215020	7140	Telephone Equipment	\$ 850.00	\$ 850.00	\$ 1,700.00	
2360	1300215020	7240	Maintenance	\$ 850.00	\$ 850.00	\$ 1,700.00	
2360	1300215020	7250	Postage	\$ 85.00	\$ 85.00	\$ 170.00	
2360	1300215020	7310	Dues & subscriptions	\$ 850.00	\$ 850.00	\$ 1,700.00	
Subtotal				\$ 773,702.35	\$ 812,249.00	\$ 1,591,951.35	
2360	1300215020	641000	DAQEM Overhead	\$ 224,373.68	\$ 235,552.21	\$ 461,665.89	
2008-2011 Administration Total				\$ 998,076.03	\$ 1,047,801.21	\$ 2,053,637.24	

**Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Permit Condition Project Concept Summary Form: 2009-2011 Biennium
Due: May 28, 2008**

Project Name:

Adaptive Management Program

Location of activities, MSHCP Management Area (IMA/LIMA/MUMA/UMA) and land manager/owner:

Project concept is programmatic and will address all coverage and mitigation areas addressed by the MSHCP and Section 10 incidental take permit.

Project Goal:

To provide for ongoing development of the Adaptive Management Program component of the MSHCP.

Project Description and Anticipated Benefit:

An Adaptive Management Program is a required element of the MSHCP. This funding will provide for:

- an independent, Science Advisor contractor who will provide
 - review of DCP Staff programmatic analyses of land use trends, habitat loss by ecosystem and implementation status;
 - analysis of covered species status, ecosystem health and MSHCP programmatic effectiveness; and
 - science-based recommendations on future implementation of MSHCP.
- contractor(s) who will provide
 - updates to species models and
 - data generation to fill gaps in vegetation, soil and threat datasets being generated currently by the agencies in the Southern Nevada Agency Partnership.
- contractor(s) who will provide technical peer review of the products of Science Advisor and MSHCP implementation projects.
- 2 full time staff who will provide
 - oversight and project management of the above contractors;
 - maintenance and administration of the database containing MSHCP-generated and related spatial and aspatial data;
 - analysis of land use trends, habitat loss by ecosystem and implementation; and
 - production of periodic status reports on the Adaptive Management Program.

Project Approach / Methods:

Staff and contractors will be used to perform the above functions using the best available scientific and commercial data.

Estimated Project Cost:

\$974,950.00

Specific Incidental Take Permit Condition Addressed by this Concept:

This project fulfills MSHCP commitment to development of an Adaptive Management Program as described in sections 2.1.8.1 and 2.8.2.2 of the MSHCP.

Adaptive Management Program Budget Detail

Fund	Fund Center	Commitment Number	Commitment Item Name	2009 - 2010 Budget	2010 - 2011 Budget	2009-2011 Biennium Budget	Notes
2360			Salaries + Benefits	\$ 200,000.00	\$ 200,000.00	\$ 400,000.00	This is for 2 years for the 2 full time positions assigned to the program
2360	1300215020	663400	Office Supplies	\$ 7,500.00	\$ 7,500.00	\$ 15,000.00	
2360	1300215020	648100	Printing & Reproduction	\$ 9,950.00	\$ 10,000.00	\$ 19,950.00	
2360	1300215020	649510	Training/Travel	\$ 10,000.00	\$ 10,000.00	\$ 20,000.00	\$5,000 * 2 yrs * 2 professional members
2360	1300215020	663610	Computer & Supplies	\$ 20,000.00	\$ 20,000.00	\$ 40,000.00	computer, off-the-shelf dataset acquisition, software
2360	1300215020	7310	Dues & subscriptions	\$ 1,000.00	\$ 1,000.00	\$ 2,000.00	
Subtotal			Subcontract(s)	\$ 478,000.00	\$ -	\$ 478,000.00	Independent Science Advice, Peer Review, Data Generation and Species Modeling
				\$ 726,450.00	\$ 248,500.00	\$ 974,950.00	
2009-2011 AMP Total				\$ 726,450.00	\$ 248,500.00	\$ 974,950.00	

**Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Permit Condition Project Concept Summary Form: 2009-2011 Biennium
Due: May 28, 2008**

Project Name:

Boulder City Conservation Easement Management, Maintenance and Law Enforcement

Location of activities, MSHCP Management Area (IMA/LIMA/MUMA/UMA) and land manager/owner:

Project concept addressed the Boulder City Conservation Easement (BCCE) held by Clark County as MSHCP Plan Administrator on lands owned by the City of Boulder City.

Project Goal:

To provide for ongoing management and enforcement of the BCCE as mitigation for the section 10 incidental take permit.

Project Description and Anticipated Benefit:

This project concept will fund continued law enforcement operations, boundary fencing and signage, road network monitoring and signage, permitted-activity monitoring, public information, monitoring and discouragement of prohibited uses, removal of dump sites, containment of an unauthorized pet cemetery and anticipated restoration activities to be defined by the BCCE Management Plan funded in the 2005-2007 biennium.

Project Approach / Methods:

Staff and contractors will be used to perform the above functions using the best available scientific and commercial data. Appropriately certified peace officer personnel will conduct law enforcement activities with possible assistance from other parties.

Estimated Project Cost:

\$340,000.00

Specific Incidental Take Permit Condition Addressed by this Concept:

This project fulfills MSHCP commitment to comply with the terms and conditions of the Interlocal Agreement between Clark County and the City of Boulder City for the purchase and maintenance of an 85,000 acre conservation easement in Boulder City, Nevada. Item 5(c) of the BCCE agreement requires Clark County to provide peace officers to patrol the property on a regular basis to enforce the applicable ordinances (Boulder City Ordinance #972) and to monitor and discourage prohibited uses referred to in the agreement.

**Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Permit Condition Project Concept Summary Form: 2009-2011 Biennium
Due: May 28, 2008**

Project Name: Desert Tortoise Hotline and Pick-Up Service.

Location of activities, MSHCP Management Area (IMA/LIMA/MUMA/UMA) and land manager/owner (8.5x11 map attached as Attachment 1): Throughout Clark County, Nevada.

Project Goal: The goal of this project is to provide a hotline and pick-up service to handle desert tortoises which are displaced by development or appear to be in harm's way within urban areas, and provide for management of these tortoises at the Desert Tortoise Conservation Center (DTCC). An additional goal of this project is to address measures regarding unwanted pet desert tortoises.

Project Description and Anticipated Benefit: The County provides a hotline and pick-up service to handle desert tortoises which are displaced by development or appear to be in harm's way within urban areas, as well as unwanted pet tortoises. This service is currently free of charge and is provided to developers who do voluntary surveys of their property prior to disturbance and to individuals who find a tortoise wandering near urban development. The pick-up service has picked up over 15,000 desert tortoises since 1995 and has averaged approximately 2,400 pick-ups per biennium over the last three biennia. The majority of tortoises picked up are unwanted or stray pets.

Tortoises picked up by this service are taken to the DTCC for management and disposition, which is currently managed by the US Fish and Wildlife Service (FWS). The County provides funding to the FWS to provide care and management of these tortoises for one year.

The management of unwanted and stray pet desert tortoises is currently being evaluated and this project may include implementation of measures put forth from a Pet Desert Tortoise Task Force, to be appointed by the Clark County Board of County Commissioners. These options could include the continued management of these tortoises through the pickup service and DTCC, or other options yet to be determined.

Project Approach / Methods: This project includes maintaining a hotline for tortoise calls and requires staff to return calls within four (4) hours and pick up the unwanted or displaced tortoises within 24 to 48 hours. If the call originated outside the Las Vegas Valley or Boulder City, the tortoise is to be picked up by the end of the next working day. County staff currently manages this service, but it may be outsourced through a request for proposal process.

It is anticipated that the County will continue to enter into agreements with the FWS, or other entity/contractor, for the management of Clark County tortoises at the DTCC.

Once the Pet Desert Tortoise Task Force makes recommendations on how to best manage the pet desert tortoise population, the County will consider whether those measures can be managed with County staff or must be outsourced.

Estimated Project Cost:
\$595,000

Funding for the hotline and pick-up service currently comes from the Clark County Desert Conservation Program's Section 10 account, which accrues from the \$550 per acre disturbance fee paid for each non-municipal acre (up to 145,000) disturbed under the MSHCP Section 10(a)(1)(B) permit. The fees are managed in an endowment fund.

Specific Incidental Take Permit Condition Addressed by this Concept: Clark County's responsibilities regarding desert tortoise pickup were established in the 1995 Desert Conservation Plan (DCP) and 2001 Multiple Species Habitat Conservation Plan (MSHCP) and Section 10 Permit #TE034927-0. The 2001 MSHCP cites the pick-up service as an important feature in the DCP in section 2.2.4.2 and lists a pick-up service for unwanted pet tortoises as a potential conservation action to address unauthorized release of captive tortoises under section 2.4.2.6, Threat 1704.

**Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Permit Condition Project Concept Summary Form: 2009-2011 Biennium
Due: May 28, 2008**

Project Name:

Management of Acquired Properties and Water Rights

Location of activities, MSHCP Management Area (IMA/LIMA/MUMA/UMA) and land manager/owner:

Project concept will address all properties and water rights acquired by Clark County or others on the DCP's behalf to mitigate for take as described MSHCP and Section 10 incidental take permit. Currently those properties occur in the upper Muddy River floodplain and the water rights are associated with Grazing Allotments located throughout the Mojave Desert that were purchased by or on behalf of the DCP.

Project Goal:

To provide for ongoing maintenance and management of those properties and water rights to ensure their value for species covered by the MSHCP does not diminish.

Project Description and Anticipated Benefit:

This project concept is to allow for the maintenance and management of properties along the Muddy and Virgin Rivers and Meadow Valley Wash as required in the section 10 incidental take permit for coverage of avian species listed in section 2.1.6 of the MSHCP. This project concept will also allow for the administration, maintenance and management of water rights acquired by or on behalf of Clark County to mitigate for take under the section 10 incidental take permit.

Project Approach / Methods:

Staff and consultants will conduct monitoring and records research to document status of the properties and water rights. Administrative and legal actions to maintain water rights will be conducted as appropriate. Where practicable, threat reduction activities (weed removal, fencing, signage, public information and restoration) will be conducted to ensure the value for covered species does not diminish.

Estimated Project Cost:

\$255,000.00

Specific Incidental Take Permit Condition Addressed by this Concept:

This project concept is to allow for the maintenance and management of properties along the Muddy and Virgin Rivers and Meadow Valley Wash as required in the section 10 incidental take permit for coverage of avian species listed in section 2.1.6 of the MSHCP.

**Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Permit Condition Project Concept Summary Form: 2009-2011 Biennium
Due: May 28, 2008**

Project Name:

Clark County Public Information and Education

Location of activities, MSHCP Management Area (IMA/LIMA/MUMA/UMA) and land manager/owner (8.5x11 map attached as Attachment 1):

Throughout Clark County (no map attached)

Project Goal:

This project will provide for education and information efforts to encourage respect, protection and enjoyment of natural ecosystems in Clark County, to increase public understanding and awareness of the value of Clark County's natural ecosystems, and to support the administration of the Desert Conservation Program.

Project Description and Anticipated Benefit:

Clark County's Public Information and Education (PIE) program incorporates a suite of different projects designed to meet permit requirements and support the administration of the Desert Conservation Program.

Projects include but are not limited to:

- Mojave Max Emergence Contest and Education Program - this includes implementation and support for this program, partnering with the Clark County School District and Red Rock Interpretive Association.
- Desert tortoise habitat education and display - this includes developing and/or maintaining an educational display at the Clark County Government Center to educate the public on desert tortoises and their natural habitat.
- "Respect, Protect, and Enjoy our Desert" mass media campaign - this includes a media mix of advertising to promote awareness of the need for responsible desert use.
- Construction site education - this includes efforts to inform developers and construction site workers on proper conduct when they find desert tortoises on their construction sites.
- Campaigns informing citizens of the laws surrounding desert tortoises - this includes educating citizens on what to do if they find a desert tortoise in the wild, on highways, and on streets within urban areas, etc. to promote proper conduct.
- Community outreach - this includes promoting various aspects of the Desert Conservation Program by developing and disseminating literature and promotional products and participating in community outreach events.

Project Approach / Methods:

Historically Clark County has contracted with various agencies and companies to complete projects that fall within the PIE program, as well as conducted some of the work with County staff. It is the County's intent to continue this process to successfully develop and implement the PIE program. Educational efforts target specific interest groups, children, and the general public.

Estimated Project Cost:
\$170,000

Specific Incidental Take Permit Condition Addressed by this Concept:
This project addresses Condition H, which requires the County carry out minimization, mitigation, and monitoring measures specified in section 2.8 of the MSHCP (2.8.3.4, Public Information and Education Program).

Clark County Public Information and Education Budget Detail

PIE budget - 2009-2011

NOTE: Funding from the 2005-07 biennium has been budgeted to cover the 2007-09 and into 2009-11 for some existing projects

Project	Estimated funding needed
1 Mojave Max Emergence Contest & Education Program	25000
2 Desert tortoise habitat education & display	15000
3 "Respect, Protect, & Enjoy Our Desert" campaign	30000
4 Construction Site Education	25000
5 Campaigns regarding tortoise law	25000
6 Community outreach	30000
7 Other	20000
	170000

1 This includes the media campaign to promote the Contest (20,000) only, RRCIA contract runs thru 2011

2

3 This includes the media campaign for 2011, as there is currently funding thru 2010

4

5

6 This is to cover outreach materials for 2010 & 2011, and to cover fairs/events/etc for 2009-2011

7 This is for unanticipated needs related to DCP administration activities, or can supplement other categories

**Multiple Species Habitat Conservation Plan (MSHCP)
Desert Conservation Program (DCP)
Permit Condition Project Concept Summary Form: 2009-2011 Biennium
Due: May 28, 2008**

Project Name:

Clark County Fencing Program

Location of activities, MSHCP Management Area (IMA/LIMA/MUMA/UMA) and land manager/owner (8.5x11 map attached as Attachment 1):

Throughout Clark County, see attached map from November 2006 showing fencing status.

Project Goal:

This project will provide for retrofitting, monitoring and maintenance of existing tortoise-proof fencing within Clark County, as well as installation of new tortoise-proof fencing along roadways within Clark County.

Project Description and Anticipated Benefit:

Highway fencing to prevent desert tortoise mortalities is identified as a conservation action in the Desert Tortoise Recovery Plan (1994). The Desert Tortoise Management Oversight Group (MOG) and their Technical Advisory Committee (TAC) also have identified highway fencing as one of the conservation actions necessary for the establishment of Areas of Critical Environmental Concern (ACECs) for the desert tortoise. The United States Fish and Wildlife Service (USFWS) has required fencing of new roads and of road expansion projects in desert tortoise Critical Habitat and ACECs as mitigation.

Thus, Clark County places a high priority on fencing or barriers to protect desert tortoise populations and other wildlife from highway traffic as mitigation for take of tortoises and tortoise habitat in Clark County.

The County anticipates that the majority of the new fence installation will be completed within the 2007-09 biennium. This project will consist mainly of retrofitting and monitoring and maintenance of fences.

Project Approach / Methods:

Clark County has historically contracted with the Nevada Division of Forestry to install new fencing and retrofit existing fencing, and intends to continue this course to implement that portion of this project. For monitoring and maintenance of fencing, Clark County intends to contract with the Nevada Department of Transportation.

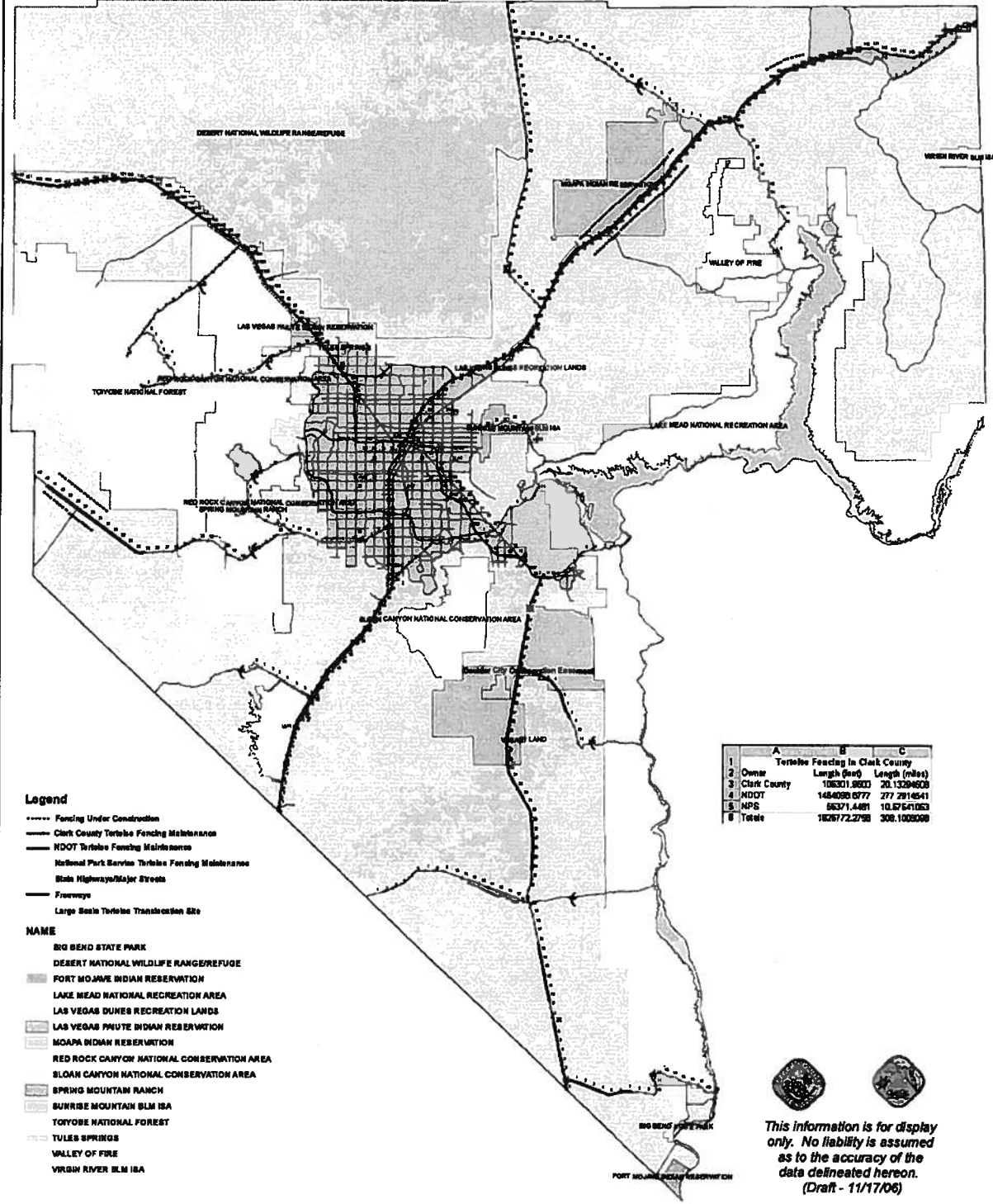
Estimated Project Cost:

\$425,000.

Specific Incidental Take Permit Condition Addressed by this Concept:

This project addresses Condition H, which requires the County carry out minimization, mitigation, and monitoring measures specified in section 2.8 of the MSHCP (2.8.3.7 Construction, Monitoring, and Maintenance of Barriers along Linear Features), and Condition N, Highway and Road Fencing.

Tortoise Fencing in Clark County
(Status - 11/2008)



Legend

- Fencing Under Construction
- Clark County Tortoise Fencing Maintenance
- NDOT Tortoise Fencing Maintenance
- National Park Service Tortoise Fencing Maintenance
- State Highways/Major Streets
- Freeways
- Large Scale Tortoise Translocation Site

NAME

- BIG BEND STATE PARK
- DESERT NATIONAL WILDLIFE RANGE/REFUGE
- FORT MOJAVE INDIAN RESERVATION
- LAKE MEAD NATIONAL RECREATION AREA
- LAS VEGAS DUNES RECREATION LANDS
- LAS VEGAS PRUTE INDIAN RESERVATION
- MOAPA INDIAN RESERVATION
- RED ROCK CANYON NATIONAL CONSERVATION AREA
- SLOAN CANYON NATIONAL CONSERVATION AREA
- SPRING MOUNTAIN RANCH
- SUNRISE MOUNTAIN BLM ISA
- TOYOBE NATIONAL FOREST
- TULE SPRINGS
- VALLEY OF FIRE
- VIRGIN RIVER BLM ISA

	A	B	C
1	Tortoise Fencing in Clark County		
2	Owner	Length (sqft)	Length (miles)
3	Clark County	106301.8600	20.13294608
4	NDOT	1484098.6777	277.2914541
5	NPS	86371.4481	16.37641063
6	Total	182772.2758	308.1005008



This information is for display only. No liability is assumed as to the accuracy of the data delineated hereon. (Draft - 11/17/06)

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**ATTACHMENT 7
MINUTES
MULTIPLE SPECIES HABITAT CONSERVATION PLAN (MSHCP)
PROPOSED 2009-2011 IMPLEMENTATION PLAN & BUDGET
IMPLEMENTING AGENCY REVIEW MEETING
Clark County, Pueblo Room (first floor)
500 Grand Central Parkway, Las Vegas, Nevada
Monday June 30, 2008**

I. CALL TO ORDER

Marci Henson called the meeting to order at 1:30 p.m.

II. INTRODUCTIONS

Meeting Facilitator: Marci Henson, Clark County, Desert Conservation Program (DCP) Manager

In Attendance:

Marci Henson, Clark County DCP Program Manager
John Tennert, Clark County Sr. Management Analyst
Sue Wainscott, Clark County Sr. Management Analyst
Jodi Bechtel, Clark County Sr. Management Analyst
Lee Bice, Clark County Sr. Management Analyst
Iris Kikuchi, Clark County Administrative Specialist
Mark Stone, Desert Research Institute, DRI
Judith Lancaster, DRI
David Mouat, DRI
Jan Schweitzer, City of North Las Vegas
Julie Ervin-Holoubok, Nevada Department of Transportation
Carrie Ronning, Bureau of Land Management (BLM)
Nancy Christ, BLM
Michael N Johnson, City of Henderson
Ross Haley, National Park Service (NPS)
Alice Newton, NPS
Cris Tomlinson, Nevada Division of Wildlife (NDOW)
Catherine Lorbeer, City of Mesquite
Janet Bair, Fish and Wildlife Service (FWS)
Erik Peters, City of Las Vegas (CLV)
Cheng Shih, CLV

III. OVERVIEW OF AGENDA AND MEETING GOALS

- To engage in an informal conversation on the process used by the Permittees to draft the 2009-2011 biennium budget.
- To solicit input from the implementing agencies that submitted projects on the draft budget.
- To solicit input from the implementing agencies and Science Advisor on any other recommendations, considerations or, revisions, if necessary.
- To inform the implementing agencies on the planned public meeting scheduled for July 15, 2008.

IV. OVERVIEW OF 2009-2011 DRAFT IMPLEMENTATION PLAN AND BUDGET

Marci Henson, DCP Administrator, reminded the group that a draft of budget was sent to everyone for review approximately two weeks earlier. Marci briefly explained the process outlined in the MSHCP to develop the biennial budget on the 2009-2011 budget represents the seventh biennial year of implementation.

Marci then referred the group to pages 1-2 of the draft budget report, highlighting key upcoming dates and attachment(s) at the back of the draft report.

Marci stated that the Permittees looked to the MSHCP for guidance in determining a budget cap, noting that

the total proposed biennial budget is \$7,179,827. Referring to page 3, Marci noted that the budget was divided between permit conditions or explicit MSHCP required project concepts and discretionary implementing projects. The report provides detailed information on the Science Advisor and Permittee review process and final proposal rankings of discretionary projects. No ranking process was done for non-discretionary permit conditions. Page 4 provides an outline of the final Permittee rankings, which include consideration of the science advisor rankings.

Marci briefly described how the Permittees came to their final determinations on project rankings, noting that while the permittees reviews did vary, they found no need to make any changes to the rankings.

Page 5 displays a detailed 2009-2011 Implementation Plan and Budget based on the rankings of the Permittees. Seven projects (highlighted in blue) are required by the MSHCP Permit, five projects (highlighted in yellow) are funded in permittee ranking order. Two projects (highlighted in pink) were not recommended for funding based on the limited budget. Page 6 displays alternative budgets comparing how the discretionary funding would have been funded using only the Science Advisor rankings. Marci noted that while there is some variation, the actual projects recommended for funding did not change much.

V. COMMENTS FROM SCIENCE ADVISOR (DRI)

- Science Advisor was not informed of budget constraints prior to ranking projects.
- In addition to the four criteria agreed to during the February 20, 2008 meeting, DRI developed a series of sub-criteria (see page 9 of Appendix). Judith Lancaster explained the criteria scoring with results on page 12.
- David Mouat noted that the criteria and sub-criteria were approved by Clark County prior to DRI evaluating any of the proposals. In addition, DRI was not informed of the authors or their respective agencies before ranking proposals. This was done to ensure that the process was as objective as possible. Dr. Mouat concluded that there were no poor proposals and comments that all were worthwhile and important.
- Judith mentioned the rankings by projects and commented how they concluded.

VI. IMPLEMENTING AGENCY COMMENT

Comments received include:

- | | |
|---------------------------|---|
| Carolyn Ronning, BLM: | Appreciates the fact that there was a science review and management review on projects. |
| Alice Newton, NPS: | Requests individual permittees ranking process of each project on page 12. Asked why Clark County went through the entire process for developing criteria for the Science Advisor if they were going to ignore their recommendations? |
| John Tennert, CC: | Noted that attachment 5 displays the ranking criteria used by the Permittees and highlighted that one of the criteria specifically incorporates the science advisors as one factor with other multiple assessments used. |
| Jan Schweitzer, City NLV: | Appreciates the county going to Science Advisors for their rankings, knows the difficulty in ranking each project. |
| Cheng Shih, City of LV: | Agreed with Jan's comments and noted that the science advisors assessment is a recommendation that was taken into account along with other factors. |
| Cris Tomlinson, NDOW: | Are any projects continuing from previous years? |
| Marci Henson, CC: | On page 5, the highlighted blue projects are required by the |

permit, yellow highlighted projects are funded in permittee ranking order. We need to get to a point in our permit plan, where we need to go and what needs to be done? Noted that the program needs to know some assurances and know funding upfront.

- Judith Lancaster, DRI: What long term do you consider viable? 5, 10 year projects?
- Marci Henson, CC: More than 5, less than 30.
- Cris Tomlinson, NDOW: How much consideration does this whole evaluation of conservation management ranking used as a strategy and was it considered with the outcome from the science advisors?
- Janet Bair, FWS: Commended the Permittees on their development of criteria used to develop the proposed budget. Recommended that the Permittees consider using similar criteria in the future.
- David Mouat, DRI: DRI and permittees use similar criteria developed during the workshop.
- Alice Newton, NPS: Comments that the Desert Tortoise Rehabilitation program is monitoring not rehabilitation. Requests consistency among the project rankings.
- Janet Bair, USFWS: MSHCP cannot be the solution to funding issues for all of the land management needs in Clark County. Why can't some of the projects proposed for funding be funded through the conservation initiatives program?
- Carolyn Ronning, BLB: We have gone through processes like this and SNPLMA is limited to funding Federal Agencies.
- John Tennert, CC: We must concentrate on the species that is on the endangered list which must be at the top of the list.
- Carolyn Ronning, BLB: The more we understand about the program needs and priorities, the better we can identify the best fit for funding source. It will benefit future scientists to understand the dynamics. Suggests pull together the land management and regulatory agencies together to get their ranking to get a different perspective.
- Janet Bair, FWS: Outlined six areas of concern. 1) Need to look at the cost of doing things. 2) Highway fencing: do we have significant value? Did we evaluate? 3) Management of acquired properties and water rights: costly grazing and allotments. We need to analyze water rights since costs are too high.
- Marci Henson, CC: Fencing will be done by June 2009. We have medium to low priority projects. Costs are based bottomed zero to keep leaves removed, and prevent vandalism. Water rights cost \$30,000 when water rights were sold, every 5-7 years. We can show documents to back it up.
- Janet Bair, FWS: Federal mitigation projects and amendments have been discussed between FWS and CC about the direct and indirect impact verse the direct and indirect losses. FWS is taking a careful look at future federal landscape for funding.
- Sue Wainscott, CC: Briefly discussed Attachment 7 which outlines the Adaptive Management

Budget.

- Janet Bair, FWS: Desert Tortoise: proportion line distance sampling and what is CC responsible for? Recovery: all agencies are not supplying support due to budget issues. What are DRI's concerns? DT Recovery needs to hear more. Requests have been made and not supplied. Are data and scientific methods correct? We need to have more discussion on DRI's decision.
- Sue Wainscott, CC: Does DRI have enough information on monitoring protocol to have this discussion?
- Judith and David, DRI: Not right now. The methods are not developed and we would need more information to fit the criteria, 2 pages are not enough.
- Marci Henson, CC: Methodologies do change and every year there are substantial changes. CC will take responsibility for the permittees decision.
- Janet Bair, FWS: Cost of permit administration, why? Need to justify costs. Make list more transparent for justification reasons.
- John Tennert, CC: Current administration costs \$2 million plus with salaries at 15.9% which includes computer equipment, building costs. At the moment we have 8 limited term employee (LTE) of 18 employees. Overall since 1999, 10% was designated for salaries. Comparison with other HCPs based solely on percentages can be misleading because most other HCPs have high costs in land acquisitions where Clark County has none. Also noted that adaptive management is not included in the administrative costs.
- Jan Schweitzer, City NLV: CC manages the day-to-day MSHCP program and does a great job.
- Marci Henson, CC: Agrees about making the budget transparent for review.

VII. WRAP-UP AND ADJOURNMENT

The meeting was adjourned at 3:30 p.m.

**ATTACHMENT 8
MINUTES & RESPONSE TO PUBLIC COMMENT
MULTIPLE SPECIES HABITAT CONSERVATION PLAN (MSHCP)
PROPOSED 2009-2011 IMPLEMENTATION PLAN & BUDGET PUBLIC MEETING
CLARK COUNTY GOVERNEMENT CENTER, PUEBLO CONFERENCE ROOM
500 GRAND CENTRAL PARKWAY, LAS, NEVADA
TUESDAY, JULY 15, 2008**

I. CALL TO ORDER

Marci Henson called the meeting to order at 6:30 p.m.

II. INTRODUCTIONS

Meeting Facilitator: Marci Henson, Clark County Department of Air Quality & Environmental Management (DAQEM)

In Attendance: Susan Wainscott, Clark County DAQEM
Ann Magliere, Clark County DAQEM
Lee Bice, Clark County DAQEM
John Tennert, Clark County DAQEM
Jodi Bechtel, Clark County DAQEM
Larry Cruikshank, View Newspaper
Brok Armontrout, City of Boulder City
Betty Burge, Tortoise Group
Kathy Utiger, Tortoise Group
Nancy Hall, Friends of Gold Butte
Carolyn Ronning, Bureau of Land Management
John Willis, City of Mesquite
Jan Schweitzer, City of North Las Vegas
Jef Jaeger, University of Nevada Las Vegas
Cayenne Engel, University of Nevada Las Vegas
Bob Abella, University of Nevada Las Vegas
Jessica Spencer, University of Nevada Las Vegas
Alexis Suazo, University of Nevada Las Vegas
Scott Abella, University of Nevada Las Vegas
Alice Newton, National Park Service
Fred Couzens, Review Journal/Boulder City View
Janet Bair, US Fish & Wildlife Service
Jeri Krueger, US Fish & Wildlife Service
Julene Haworth, Public
Tom O'Farrell, Public
Eric Hawkins, H2 Outreach
Elise McAllister, Partners in Conservation
Michael Johnson, City of Henderson

III. OVERVIEW OF AGENDA AND MEETING GOALS

- To present the process and draft of the 2009-2011 Implementation Plan & Budget
- To present the outcomes and preliminary deliberations
- Take questions from attendees at tonight's meeting
- Invite the attendees to learn more about the discretionary projects
- Give feedback on the non discretionary projects
- Allow the project proponents the opportunity to answer questions regarding the projects
- Take written comments

IV. PRESENTATION OF THE PROPOSED 2009-2011 IMPLEMENTATION PLAN & BUDGET

Marci Henson presented the 2009-2011 Implementation Plan & Budget as follows:

Clark County serves as Plan Administrator on behalf of the cities of Boulder City, Henderson, Las Vegas, North Las Vegas, Mesquite; and the Nevada Department of Transportation.

- Compliance with the federal Endangered Species Act through a Section 10(a)(1)(B) incidental take permit
- Implementation of the Clark County Multiple Species Habitat Conservation Plan (MSHCP)

Definition of Take

- To harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect or attempt to engage in such conduct; includes significant habitat modification

Incidental Take Permit (ITP)

- Exempts a permittee from the prohibited take of a protected species
- Allows development of private lands without individual project consultations with USFWS for incidental take of species covered by the permit

Habitat Conservation Plan

- A planning document that is a mandatory component of an incidental take permit application
- Ensures that the effects of the authorized take are adequately minimized and mitigated
- The MSHCP is the implementation plan for the current incidental take permit

MSHCP

Covers all non-federal (private, municipal, state) lands within Clark County and NDOT activities in areas within Clark, Nye, Lincoln, Mineral and Esmeralda Counties south of the 38th parallel and below 5,000 feet in elevation.

The Plan includes:

- Baseline species and habitat analyses
- Conservation actions (604)
- Funding mechanisms
- Implementation guidelines
- 30-year permit starting February 2001
- "Take" cannot exceed 145,000 acres
- Permittees collect a \$550 per acre disturbance fee to fund implementation
- Relies on a reserve system where the MSHCP achieves conservation by augmenting existing funding/conservation on federal lands
- Federal agencies important partners in the implementation of the MSHCP

Conservation Strategy

The MSHCP classifies lands county-wide by 4 categories of management:

- Intensively Managed Areas
- Less Intensively Managed Areas
- Multiple Use Management Areas
- Unmanaged Areas (non-federal)

Covered Species

- 78 Covered species
- -2 federally listed species (desert tortoise and Southwestern willow flycatcher)
- 102 Evaluation species
- 51 Watch list species

Measures to Mitigate (Section 2.1.8.2)

- Administration of the MSHCP
- Adaptive Management Program
- Management of Acquisitions
- Desert Tortoise Translocation (Hotline, Pick-Up Service)
- Clark County Fencing Program
- Clark County Public Information & Education
- Funding of Conservation Measures & Local Rehab. Projects

Implementation Plan & Budget

- Developed bi-annually (even numbered years)
- Identifies the mitigation actions to be implemented each biennium

- Reviewed and recommended by:
 - Plan Administrator on behalf of permittees
 - U.S. Fish and Wildlife Service
 - Science Advisor (DRI)
 - Public Comment
- Approved by Clark County Board of County Commissioners and U.S. Fish and Wildlife Service

Funding

- Required to spend a minimum of \$4 million/biennium
- Three funding sources:
 - Section 10 mitigation fees
 - Section 7 mitigation fees
 - Southern Nevada Public Lands Management Act

Current Take and Fees

Permittee	Acres	Fees
Clark County	25,860.58	\$ 14,191,267
Boulder City	658.27	361,172
Henderson	12,260.83	6,577,808
Las Vegas	9,033.08	4,845,350
Mesquite	3,200.53	1,633,573
Nevada Department of Transportation	30.87	16,731
North Las Vegas	9,302.70	5,091,614
Total	60,346.86*	\$ 32,717,515

*Does not include 15,000 fee exempt acres

Funding by Source:

Total funding approved \$88,557,567
 Section 10 \$28,043,783
 Section 7 \$3,427,900.00
 SNPLMA \$57,085,884

Funding by Category:

Administration 12%
 Public Information & Education 3%
 Purchasing of Grazing Allotments and Interest in Real Property and Water 1.2%
 Construction, Monitoring and Maintenance of Barriers Along Linear Features 6.7%
 Translocation of Desert Tortoises 6%
 Participation in Local Restoration and Rehabilitation Projects 53.1%
 Adaptive Management Program 17.3%

Funding by Sub-Category:

Law Enforcement 13.2%
 Roads/OHV Activities 6.4%
 Bats .4%
 Birds .7%
 Butterflies .1%
 Chipmunk .3%
 Covered Species 1.9%
 Ecology 2.4%
 Pocket Mouse 2.5%
 Relict leopard frog 3%
 Rare Plants 3.6%
 Restoration 4%
 Weeds 4.8%
 Tortoise 6%
 Wildlife Damage 6.3%
 Reptiles/amphibians 9.6%

Conservation Management Plans 10.3%
Effectiveness Monitoring 24.5%

Implementation:

Implementation is monitored through:

- Quarterly Administrator updates
- Quarterly financial, mitigation fee and land disturbance reports
- Biennial Progress Report (October 15 each odd year)
- Biennial Adaptive Management Report (March 15 each even year)

Program Accomplishments:

- Since 1999, DCP has authorized 285 conservation projects totaling more than \$88 million
- Roughly equivalent to \$1,180 per acre disturbed
 - Double the amount required under the permit
- Implemented 459 of the 604 conservation actions identified in the MSHCP
- Have initiated or completed all of the 22 conditions specifically identified in the permit (four of which are ongoing policies)
- Manage an 85,000-acre conservation easement in Eldorado Valley
- Constructed more than 300 miles of desert tortoise fencing (roughly 1.6 million linear feet) at a cost of more than \$5.9 million
- Transferred more than 10,000 desert tortoises to the Desert Tortoise Conservation Center and Holding Facility
- Translocated more than 4,000 desert tortoises to the Large-Scale Translocation Site in Ivanpah Valley
- Retired more than 1.9 million acres of grazing allotments and associated water rights
- Spent more than \$6 million for law enforcement and resource protection on federal land
 - Roughly 30 FTEs (assuming \$200,000/year)
- Spent approximately \$3 million to survey, close and/or restore illegal OHV roads on federal land
- Purchased more than 500 acres of riparian habitat
- Identification, assessment, restoration and monitoring of desert tortoise habitat
- Invasive plant management
- Habitat restoration along the Las Vegas Wash
- Habitat restoration and management of Knapweed and Tamarisk on the Muddy River
- Received more than 36,200 entries for the Mojave Max Emergence Contest
- Presented to more than 10,000 Clark County School District students via Mojave Max assemblies
- Developed media and PSAs to educate broad community about the purpose and value of the program
- Participate in numerous regional community outreach and education programs and events

Funded and/or participated in the completion of the following conservation planning documents:

- Piute Eldorado DWMA Conservation Management Strategy
- Gold Butte DWMA Conservation Management Strategy
- Mormon Mesa DWMA Conservation Management Strategy
- Coyote Springs DWMA Conservation Management Strategy
- Mesquite-Acacia Conservation Management Strategy
- Low Elevation Plants (9) Conservation Management Strategy
- Upper Muddy River Integrated Science Assessment
- Wilderness Study Area Re-designation within Clark County
- Virgin River Conservation Management Assessment (ongoing)
- Spring Mountains Landscape Assessment (ongoing)

History:

August 4, 1989 Mojave desert tortoise is emergency listed; formally listed as threatened on April 2, 1990
January 1991 Short term Habitat Conservation Plan is approved
August 5, 1995 Long term Habitat Conservation Plan is approved
August 1996 Permittees initiate development of a Multiple Species Habitat Conservation Plan (MSHCP)
September 2000 MSHCP is completed; Implementing Agreement approved November 2000 by permittees and state/federal land management agencies
February 2001 US Fish & Wildlife Service issues incidental take permit for MSHCP
December 2004 Clark County commissions a Program Management Analysis (PMA) to assess MSHCP implementation

June 2006 Clark County convenes Short-term Advisory Committee in response to findings of PMA
December 2006 Short-term Advisory Committee recommends Permittees amend MSHCP and Permit
June 2007 Board of County Commissioners directs staff to initiate permit amendment

Permit Amendment:

- In 2005, the Southern Nevada Growth Task Force recognized need to address acreage cap
- In 2006, the DCP Advisory Committee identified amendment of the permit as a high priority
- On June 19, 2007, the Board of County Commissioners directed staff to initiate permit and plan amendment process
- Nationwide, large, regional, multi-party, MSHCPs are being reassessed

MSHCP Acreage Cap:

There are approximately 107,000 acres of undeveloped land within the existing disposal boundaries that will not be covered for take

- Absent amendment, individual landowners will be required to develop individual HCPs

Permit Amendment:

- Address acreage cap
- Re-evaluate the list of covered species
 - Refocus attention on those species directly impacted by take
- Review list of covered activities
- Re-evaluate conservation actions/mitigation strategy

MSHCP and Permit Amendment:

- Revised Interlocal Agreement pending approval by permittee governing boards
- Establishes process for permit amendment
- Creates an Executive, Process Management and Technical Advisory Committee(s)
- Will also convene a Citizen Advisory Committee to provide public input
- Process will result in:
 - Amended Habitat Conservation Plan
 - Amended Implementation Agreement
 - Amended Environmental Impact Statement
- Draft HCP anticipated in early 2010

Difficult Transition:

- Implementing in good faith while we make progress on permit amendment
- Budget process has been identified by the permittees as an area for significant amendment.
- County, as Plan Administrator, implementing a budget process responsive to MSHCP, while working to amend.
- Took key recommendations from 2006 DCP Advisory Committee into consideration.

Implementation Plan & Budget Process Attachment 1:

- Held Implementing Agency conference call
- Held Implementing Agency/Science Advisor meeting (Attachment 2)
- Issued request for non-permit condition project concepts (Attachment 3)
- Received 7 responses (Attachment 4)
- Draft Permittees review & ranking criteria (Attachment 5)
- Received Science Advisor's review & rankings report (Attachment 2)
- Received Permittees non-permit condition review and rankings
- Met with Permittees to propose budget & discretionary project concept rankings
- Met with Implementing Agencies to review draft plan and budget
- Holding public meeting to take input

Proposed 2009-2011 Implementation Plan & Budget

\$4,813,567 – Required Expenditure

\$2,366,260 – Discretionary Adj. for CPI*

\$7,179,827 – Total

* Based off of 2006 Desert Conservation Program Advisory Committee recommendation of \$1.9 million adjusted for CPI.

Required Expenditure & Permit Condition Projects:

-Clark County, as Plan Administrator, prepared the following concepts:

- Administration
- Adaptive management program

- Boulder City conservation easement mgmt.
- Desert Tortoise hotline & pick-up
- Clark County fencing program
- Mgmt. of acquired properties
- Clark County public information program

-Initial budget for permit condition concepts was \$5,597,000 and exceeded the required expenditure.

-Staff cut all permit condition projects by 15% to match the required expenditure budget of \$4,813,567.

Discretionary Budget & Non-Permit Condition Projects:

-Implementing Agencies submitted the following concepts:

- OHV Education
- Assessment of post-fire rehab
- Restoration of desert tortoise and gypsum habitat
- Relict leopard frog conservation
- Desert tortoise monitoring 2010-2011
- Gypsum habitat restoration methods...
- Mesquite/Acacia woodland assessment...

-Initial total budget of the discretionary conservation measures totaled \$3,790,000

-Exceeded the discretionary budget by \$1.4 million

-The Permittees ranked the non-permit condition projects in the following order:

- OHV education
- Assessment of post-fire rehab
- Restoration of desert tortoise and gypsum habitat
- Relict leopard frog conservation
- Desert tortoise monitoring 2010-2011
- Gypsum habitat restoration methods...
- Mesquite/Acacia woodland assessment...

Proposed 2009-2011 Implementation Plan and Budget Permittees Ranking (Draft Report, Pg 5):

Project No.	Project Title	Estimated Project Budgets	Adjusted to Meet Budget Cut Off
	Administration	\$ 2,350,000	\$ 2,053,617
	Adaptive Management Program	\$ 1,147,000	\$ 974,950
	Boulder City Conservation Easement Management, Maintenance and Law Enforcement	\$ 400,000	\$ 340,000
	Desert Tortoise Hotline and Pick-Up Service.	\$ 700,000	\$ 595,000
	Clark County Fencing Program	\$ 500,000	\$ 425,000
	Management of Acquired Properties and Water Rights	\$ 300,000	\$ 255,000
	Clark County Public Information and Education	\$ 200,000	\$ 170,000
	OHV education	\$ 350,000	\$ 350,000
	An Assessment of Post-Fire Rehabilitation of Desert Tortoise Habitat in Clark County, Nevada	\$ 400,000	\$ 400,000
	Restoration of desert tortoise and gypsum habitat	\$ 300,000	\$ 300,000
	Relict Leopard Frog Conservation	\$ 270,000	\$ 270,000
	Desert Tortoise Monitoring 2010-2011	\$ 1,840,000	\$ 1,046,260
Budget Cut Off			

N/A	Gypsum Habitat Restoration Methods and Associated Species Research for Lake Mead National Recreation Area	\$ 340,000	\$ -
N/A	Mesquite and Acacia Woodland Assessment, Monitoring, Restoration and Management for Lake Mead National Recreation Area	\$ 290,000	\$ -
Total		\$ 9,097,000	\$ 7,179,827

Permittees Rationale:

- Results from individual reviews varied; not unexpected
- Differences in permittee rankings and Science Advisor rankings are reasonably explained; does not warrant changing permittee ranking
- Permittees favored projects where on-the-ground restoration for species and habitats most directly impacted would benefit.

Next Steps:

- Clark County, as Plan Administrator, will be summarizing public comment
- Permittees will be considering the public comment as they recommend a final IPB to the BCC.
- BCC will hear permittees recommendation and public input and vote on a submittal to the USFWS.
- USFWS will provide approval/rejection.

V. QUESTIONS & COMMENTS

The question and comment period was as follows:

Question: Where can we find the first set of PIE charts?

Response: We will make that available on the website.

Question: The MSHCP refers to a committee, why was this part of the process ignored?

Response: The Implementation & Monitoring Committee (IMC) was sun-setted by the Board of County Commissioners (BCC) so this committee no longer exists. The BCC adopted an interim Advisory Committee with a very specific task. That Advisory Committee focused on permit amendment and the 2007-2009 Implementation Plan and Budget. The Program Management Analysis identified significant costs associated with convening the committee. Given this relatively small budget effort, staff found that the cost of seating the committee was not justified. This process is more efficient and less costly.

Question: This is perceived as removing the transparent process, it is now a closed process. So why if the Board can set aside the IMC why can't they set aside something like the Adaptive Management program?

Response: They can choose to do so. This will be presented to the BCC and they will vote at their discretion.

Question: Will public comment be open after this evening?

Response: Yes.

Question: How do you reconcile this project difference among the permittees? Example one project ranked third by science team and ranked last by the permittees.

Response: The permittees viewed the budget as a whole and was satisfied with what was recommended for funding versus projects that fell below the budget cutoff. It is not as important that one project ranked first versus third if both projects are being funded. In addition, the permittees finished a conservation management strategy for Mesquite/Acacia habitat and felt that the Mesquite/Acacia submitted was largely an additional planning effort. It posed no on the ground benefits and was just another specific planning effort.

Question: Was information requested by the permittees that proves the federal agencies are not replacing their budgets with MSHCP funding and why can't these projects be funded with SNPLMA and Section 7 funds?

Response: Discussions were held among the permittees and implementing agencies on alternative funding. It is our understanding that many projects submitted to Conservation Initiatives category rank low because those review groups suggest those projects can be funded by the MSHCP. The permittees did not request proof that funds are augmenting and not replacing agency budgets. The MSHCP Implementing Agreement stipulates agencies can not replace their agency budgets with MSHCP funding and instead are to augment their budgets.

Question: We cannot see who is submitting the projects, why?

Response: This was so that preconceived notions were not part of the process.

Question: If on the ground mitigation was part of the process, why was the Relict leopard frog not ranked first?

Response: We encourage you to make that comment to the permittees on your general comment card.

VI. OPEN HOUSE AND WRITTEN COMMENTS

The attendees were given an opportunity to walk the room and learn more about the project concepts being considered and to provide comments on those projects.

VII. PUBLIC COMMENT

Public comment is as follows:

Julene Haworth: The public input form process has not been subverted but has been minimized by only having government entities in the budgeting process. I would like to present an analogy: Our state legislature also has a biennial budget process which is a little like this process, I can't imagine that group would look back to last session and eliminate the assembly from vetting this budget, things change too much. This is like a three legged stool and without all of the stakeholders you are missing that very important leg of the stool. That stool falls and I feel that it is not a balanced process and that it fails.

VIII. WRAP-UP AND ADJOURNMENT

Additional written public comments should be addressed to John Tennert at tennert@co.clark.nv.us and must be received no later than July 29, 2008. The presentation will be made available on the County website.

The Desert Conservation Program next steps shall include:

- Summarize all comments
- Summarize possible reconsiderations
- Provide summary response to the public comments received

The meeting was adjourned at 8:10 p.m.

Project Specific Written Comments & Responses

Project	Comment	Response
Desert Tortoise Monitoring	The science advisory team was not pleased with the methods and track record of success of tortoise monitoring. Why was a project with poorly developed methods and a low history of usefulness funded at the rate of over \$1 million? This precluded funding other good projects and limited funding to other projects that would be more beneficial to other important species and habitats.	The DCP and Permittees recognize that there are significant issues with the current monitoring program for desert tortoise as stated in the Draft 2009-2011 Implementation and Budget Report. This is one of the reasons the Permittees chose not to fund this project for the full amount requested. However, given that the desert tortoise is the flagship species of the MSHCP and that desert tortoise monitoring is considered a high priority by the Fish and Wildlife Service, the Permittees determined that it was appropriate to fund this project at the amount recommended.
Off-Highway Vehicle Education	As the science advisory team pointed out, it is difficult to see how this project results in on the ground benefits. The project also provides no means for assessing on the ground benefits. MSHCP has stated that permittees ranked projects according to on the ground benefit. Why didn't they follow their own criteria? They ranked the project with no on the ground protocol first.	The Permittees believe that the most significant impacts of growth and development in Clark County result from illegal OHV use in adjacent public lands, primarily BLM land. The Science advisor rankings reflected their assessment that the ranking criteria developed for an evaluation of the scientific merit of proposed projects did not easily allow evaluation of this project. While the on-the-ground benefits are more difficult to track and measure, the Permittees believe that this project is an important component for mitigating for the negative impacts of take in Clark County.
Off-Highway Vehicle Education	This is important project to our public lands and needs funding. (Preferably through the OHV community). Preference should be given to science based implementation of restoration and studies.	The Permittees agree that projects like this necessarily require close coordination with the OHV community and that projects should be scientifically rigorous and defensible.
Assessment of Post-Fire Rehabilitation of Desert Tortoise Habitat in Clark County	These actions seem necessary to assessing the effectiveness of any emergency stabilization actions. This proposal seems to integrate the on the ground management that addresses appropriate mitigation, priority habitat, knowledge and information gaps and effectiveness monitoring mandated by the program.	The Permittees agree with these comments.

Assessment of Post-Fire Rehabilitation of Desert Tortoise Habitat in Clark County	Friends of Gold Butte has worked closely the last year on this project with USGS and BLM. It is important to continue the scientific research the volunteer part is a benefit to the community to understand fire dynamics in the desert. Please support this important project.	The Permittees agree with these comments.
Mesquite & Acacia Woodland Assessment, Monitoring, Research & Mgmt. for LMNRA	This project ranked highly by science advisors, the merit of which should be considered by the permittees. It addresses mitigation and conservation of sensitive habitat as suggested by the Nature Conservancy and should be strongly valued.	The Science Advisor rankings and comments were considered by the Permittees as reflected in the ranking criteria used by the Permittees to evaluate and rank proposals. The role of the Science Advisor assessments is to ensure that projects funded are scientifically rigorous and defensible. However, in making funding decisions, the Permittees must also consider non-scientific criteria, such as an assessment of what projects will most effectively mitigate for take associated with the MSHCP.
Mesquite & Acacia Woodland Assessment, Monitoring, Research & Mgmt. for LMNRA	How could this project have ranked so low when the science board ranked it so high? Does the tortoise hotline really require \$700,000? Couldn't some of that money be put toward other worthy projects?	In making funding decisions, the Permittees must also consider non-scientific criteria, such as an assessment of what projects will most effectively mitigate for take associated with the MSHCP given limited resources. Operation of the desert tortoise hotline and pick-up service is a mandatory permit condition of the program and the budgeted cost associated with the program were developed based on historical costs associated with operating the hotline and pick-up service.
Desert Tortoise Hotline & Pick-Up Service	Tortoise Group definitely wants to be involved when the pet tortoise task force is convened. Implementing the Mesquite/Acacia CMS should be a priority! Management plans that are not implemented in a timely manner are a waste of funding. Support implementation of the Mesquite/Acacia CMS.	The Permittees agree that implementation of conservation plans should be a high priority for all public land managers. The limited funding and priorities associated with the MSHCP do not preclude funding of these projects by other entities and other funding sources.
Mesquite & Acacia Woodland Assessment, Monitoring, Research & Mgmt. for LMNRA	This project was ranked 3 rd by the science advisory team and last by the permittees. It was then ranked last overall. How can you reconcile this discrepancy? The science team obviously was ignored. This project also calls for on the ground implementation (eg planting mesquite) to directly mitigate loss of mesquite community in the	The Science Advisor rankings and comments were considered by the Permittees as reflected in the ranking criteria used by the Permittees to evaluate and rank proposals. The role of the Science Advisor assessments is to ensure that projects funded are scientifically rigorous and defensible. However, in making funding decisions, the Permittees must also consider non-scientific criteria, such as an assessment of what projects will most effectively mitigate for take associated with the MSHCP. The Permittees agree that implementation of conservation plans should be a high priority for all public land managers. The limited funding and priorities associated with the MSHCP do not preclude funding of these projects by other entities

	Las Vegas Valley. Why was this project not funded? Why was the science team ignored? This project also implements MSHCP's own mesquite 2006 CMS to a tee. Why is MSHCP ignoring recommendation of their own CMS?	and other funding sources.
Gypsum Habitat Restoration Methods & Associated Species Research for LMNRA	I don't understand how this could have ranked so low... There is so little known about gypsum restoration. This knowledge is essential to the recovery of all of the gypsum (rare plant) habitat that is being degraded and destroyed. This research is cutting edge, whereas many of the other projects are not.	The Permittee evaluations and rankings reflect the need to assess and prioritize competing demands with limited funding. As a result, many worthwhile projects are not funded. While additional research is valuable, the Permittees determined that other projects were deemed higher priorities, given the mandates of the program and the need to focus on the core purpose of the MSHCP. As a result, some less cutting edge proposals were recommended for funding because the Permittees believe that they are more directly related to the current needs of the program.
Gypsum Habitat Restoration Methods & Associated Species Research for LMNRA	This project calls for implementation of on the ground restoration management and assessing the effectiveness of those techniques. As such, this project would directly benefit Las Vegas bearpoppy and other species of concern, as well as key gypsum habitat. Much of this habitat has been destroyed in the Las Vegas valley. This project would mitigate that loss on the most protected federal lands in Southern Nevada. Why was this project not funded?	The Permittee evaluations and rankings reflect the need to assess and prioritize competing demands with limited funding. As a result, many worthwhile projects are not funded. While additional research is valuable, the Permittees determined that other projects were deemed higher priorities, given the mandates of the program and the need to focus on the core purpose of the MSHCP.
Gypsum Habitat Restoration Methods & Associated Species Research for LMNRA	This concept proposal appears to address concepts requested for this funding through on the ground actions taken to restore and mitigate sensitive and rare species that are mandated for protection.	The Permittee evaluations and rankings reflect the need to assess and prioritize competing demands with limited funding. As a result, many worthwhile projects are not funded.
Relic Leopard Frog	Protecting the Relic Frog is important to future populations in Clark County.	The Permittees agree with these comments.
Relic Leopard Frog	This is a well written proposal with clear objectives and can result in on the ground habitat	The Permittees agree with these comments.

	management and assessment. This also is one of the most cost effective projects at a requested \$270k.	
Clark County Public Information & Education	At what point will Tortoise Group be able to contribute expertise to any of the projects? May we suggest further projects?	The DCP welcomes any input and feedback on all proposed projects as well as recommendations for additional projects. Interested parties can send comments and recommendations through the Program's website at: http://www.accessclarkcounty.com/depts/dagem/epd/pages/dcp_contact.aspx
Mesquite & Acacia Woodland Assessment, Monitoring, Research & Mgmt. for LMNRA	Implementing the Mesquite/Acacia CMS should be a priority! Management plans that are not implemented in a timely manner are a waste of funding. Support implementation of the Mes/Aca CMS.	The Permittees agree that implementation of conservation plans should be a high priority for all public land managers. The limited funding and priorities associated with the MSHCP do not preclude funding of these projects by other entities and other funding sources.

General Comment Cards & Responses

Source	Comment	Response
<p>General Comment Card</p>	<p>Question 3: Off Highway Vehicle Education: ranked 7 Post Fire Rehab: ranked 2, In support: Yes Restoration of DT Habitat & Gypsum: ranked 3, In support: Yes Relict Leap. Frog Conservation: ranked 4, In support: Yes DT Monitoring: ranked 6, In support: Yes Gypsum Restoration: ranked 1, In support: Yes Mesquite/Acacia Assessment: ranked 5, In support: Yes</p>	<p>Thank you.</p>
<p>General Comment Card</p>	<p>Question 1: It appears that we have a system in place where people who represent developers can completely ignore the advice and guidance of the science community in making funding decisions.</p> <p>Question 2: \$2,053,617 of the \$7,179,827 budget goes for administration. Well run programs have 10%-15% of the budget used for administration. What does all of that staff do to benefit the public?</p> <p>Question 3: Off Highway Vehicle Education: ranked 7, In support: No, project will have no impact. Need enforcement not monitoring or talk. Post Fire Rehab: ranked 5 Restoration of DT Habitat & Gypsum: ranked 1 Relict Leap. Frog Conservation: ranked 4 DT Monitoring: ranked 6 Gypsum Restoration: ranked 3 Mesquite/Acacia Assessment: ranked 2 Question 5: Too much administration, too little science.</p>	<p>The Science Advisor rankings and comments were considered by the Permittees as reflected in the ranking criteria used by the Permittees to evaluate and rank proposals. The role of the Science Advisor assessments is to ensure that projects funded are scientifically rigorous and defensible. However, in making funding decisions, the Permittees must also consider non-scientific criteria, such as an assessment of what projects will most effectively mitigate for take associated with the MSHCP.</p> <p>It is important to recognize that the 2009-2011 Implementation Plan and Budget (IPB) reflects the overall budget for new projects to be initiated during the two-year period. The 2009-2011 IPB does not include costs associated with projects approved in previous biennia that carry over into the next biennium cycle. The costs associated with administration included in the 2009-2011 reflect the implementation of between \$15 and \$25 million in projects approved in previous budgets, but not reflected in the 2009-2011 IPB. To obtain an accurate assessment of administrative costs relative to overall costs, it is necessary to base the assessment on actual expenditures during the period at issue. Assuming that the program will expend an additional \$15 million, administration amounts to less than 10 percent of total projected expenditures for the biennium.</p>

<p>General Comment Card</p>	<p>Question 3: Please rank (1-7) the discretionary project concepts in the order you believe is most appropriate. Project Rank Do you support funding this project? Yes or No</p> <p>Off-Highway Vehicle Education YES (Rules must be obeyed but not proliferated)</p> <p>An Assessment of Post-Fire Rehabilitation of Desert Tortoise Habitat 1 NO (Nature will do this fast enough for free)</p> <p>Restoration of Desert Tortoise & Gypsum Habitat NO (See above)</p> <p>Relict Leopard Frog Conservation NO (Leave to natural resources)</p> <p>Desert Tortoise Monitoring 2010-2011 NO (See above)</p> <p>Gypsum Habitat Restoration Methods and Associated Species Research for Lake Mead National Recreation Area NO (See above)</p> <p>Mesquite and Acacia Woodland Assessment, Monitoring, Restoration, and Management for Lake Mead National Recreation Area NO (Too much in one item, monitoring in LMNRA is sufficient)</p>	<p>Thank you.</p>
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<p>General Comment</p>	<p>Question 3: Off Highway Vehicle Education: ranked 7 Post Fire Rehab: ranked 4 Restoration of DT Habitat & Gypsum: ranked 6 Relict Leap. Frog Conservation: ranked 2 DT Monitoring: ranked 1 Gypsum Restoration: ranked 5 Mesquite/Acacia Assessment: ranked 3</p> <p>Question 4: The decision tool is impressive. The work from DRI and the group of professional scientists and land managers is impressive. The project descriptions are all focused on HCP goals and objectives and not who is proposing what work or whether there is an expectation of who the contractor(s) would be. Excellent.</p> <p>Question 5: OHV Education will not result in the kind of protection needed on the ground. Education is necessary but insufficient. To really make a difference in this threat, more difficult management actions are needed, such as state requirements to license ATVs, major law enforcement, aggressive penalties, etc.</p>	<p>Thank you.</p>
<p>General Comment Card</p>	<p>Question 1: Why is \$2 million in overhead sucked off the top? This is a huge sum to administer only 5 funded MSHCP projects and six other projects. This is also precluded funding two solid MSHCP projects that have direct on the ground benefits. It is a concern that the science advisory team was ignored. For example, the mesquite project ranked 3rd by the science team and last by the permittees and ended up last.</p> <p>Question 2: Preference was supposed to be given to projects with on the ground benefits. So why were projects</p>	<p>It is important to recognize that the 2009-2011 Implementation Plan and Budget (IPB) reflects the overall budget for new projects to be initiated during the two-year period. The 2009-2011 IPB does not include costs associated with projects approved in previous biennia that carry over into the next biennium cycle. The costs associated with administration included in the 2009-2011 reflect the implementation of between \$15 and \$25 million in projects approved in previous budgets, but not reflected in the 2009-2011 IPB. To obtain an accurate assessment of administrative costs relative to overall costs, it is necessary to base the assessment on actual expenditures during the period at issue. Assuming that the program will expend an additional \$15 million, administration amounts to less than 10 percent of total projected expenditures for the biennium.</p> <p>The DCP and Permittees recognize that there are significant issues with the current monitoring</p>

that the science advisory team itself said had no clear on the ground benefits (eg OHV education project) ranked highest? This meant that two projects proposing on the ground restoration and assessment were not funded. The science team also had severe concerns about the methods and history of success of the desert tortoise monitoring project. Why was this still funded at the tune of \$1 million?

Question 3:
Off Highway Vehicle Education: ranked 6, In support: No
Post Fire Rehab: ranked 2, In support: Yes
Restoration of DT Habitat & Gypsum: ranked 5, In support: Yes
Relict Leop. Frog Conservation: ranked 4, In support: Yes
DT Monitoring: ranked 7, In support: No
Gypsum Restoration: ranked 3, In support: Yes
Mesquite/Acacia Assessment: ranked 1, In support: Yes
Question 5: I do not.

program for desert tortoise as stated in the Draft 2009-2011 Implementation and Budget Report. This is one of the reasons the Permittees chose not to fund this project for the full amount requested. However, given that the desert tortoise is the flagship species of the MSHCP and that desert tortoise monitoring is considered a high priority by the Fish and Wildlife Service, the Permittees determined that it was appropriate to fund this project at the amount recommended.