

Desert Managers Group Projects

1. The Desert Managers Group is promoting 12 projects that fall into three categories:

- Resource Conservation and Habitat Restoration
- Visitor Services, Public Education, and Public Safety
- Applied Science and Monitoring

Implementation of these projects is fully consistent with the intent of the California Desert Protection Act of 1994, the Federal Land Policy and Management Act, and the Endangered Species Act.

2. The focus of the budget initiative is on the coordinated implementation of BLM, NPS, and Department of Defense land management plans for the California Desert.

Land management plans will be soon be complete for all the National Park Service units and most of the Bureau of Land Management resource areas in the California desert. In addition, Integrated Natural Resource Plans will be completed for most of the military bases in the desert. The DMG will play a critical role in meeting the public's expectation that these plans will be implemented in a coordinated, cost-effective, and timely manner.

3. Partnerships are an integral component of the effort.

Several projects include cost sharing with the Department of the Defense, other Federal agencies, and/or the State of California. In addition, partnerships with local agencies and private groups and organizations will be pursued aggressively to leverage funds to the maximum extent possible and promote local support for projects. While specific cost sharing requirements have not been established, cost sharing will be a criterion used to rank specific projects for funding.

California Desert Project Proposals

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Burro Management

Background:

Early settlers and miners introduced burros to the desert and a wild population developed quickly. Today, their numbers have increased dramatically due to lack of natural predators, their adaptability to the desert environment, and a lack of funding for control programs. Uncontrolled populations have led to extreme overgrazing, local extirpation of some native plant species, extensive disturbance of soils, and declines in biological diversity around spring areas.

The Strategic Plan for the Management of Wild Burros, signed in January, 1999, established goals and objectives for DOI and State agencies and the military to work collaboratively in sharing staff and resources to manage wild burros in the most effective and efficient manner possible.

Goals and Objectives:

Manage wild burro population in the California desert consistent with the Interagency Strategic Plan for the Management of Wild Burros.

Task Description:

1. Remove 3500 burros (1200 in FY00, 1,000 in FY01; 700 in FY02; 600 in FY03) from the California desert region (BLM, NPS, FWS, and State lands) and place in adoption programs.
2. Conduct population surveys within the herd management areas (HMA).
3. Monitor vegetation conditions in HMA's to determine appropriate long-range population levels on BLM lands and appropriate management prescriptions on NPS and other agency managed lands.

Participating Agencies:

BLM, NPS, FWS, DOD, California State Parks

Upland and Riparian Habitat Restoration

Background:

Human activities in the California deserts over the last century have resulted in tremendous damage to desert lands. Continuous and largely unplanned development, unauthorized dumping, uncontrolled illegal off-highway vehicle use, extensive military training activities, and mining have all resulted in destruction of habitat and increased wind and water erosion. Increased erosion effects regional air quality and the potential for site recover. Lost and fragmented habitat threatens native plants and animals. Restorations of impacted areas can take decades or even centuries in arid environments.

The invasion and spread of non-native plant and animal species have impacted the California desert. In particular, salt cedar or tamarisk, has invaded most riparian areas and spring habitats in the desert. Spring and riparian habitats are very rare, biologically rich and critically important. Salt cedar effectively out competes native plants, provides few wildlife benefits, uses massive amounts of water, and is often so dense that wildlife can not access critical water sources.

Goals and Objectives:

1. To restore all upland and riparian habitats identified for restoration in BLM and NPS land management plans;
2. To control the spread of invasive exotic species such as salt cedar/tamarisk.
3. To foster Federal, State and local partnerships and develop a desert-wide constituency to support upland and riparian habitat restoration and protection. Funds will be leveraged to the maximum extent possible.

Task Description:

1. Monitor and maintain a database of sites in need of restoration; document results on web site.
2. Select sites based on established criteria.
3. Produce plant materials from commercial nurseries and the nursery at Joshua Tree National Park.
4. Restore at least five high priority upland and five high priority riparian sites each year.
5. Monitor results and success of restoration efforts.

Participating Agencies:

NPS, BLM, California State Parks, Youth Conservation Corp, NGO's

Illegal Dumping

Background:

For decades, the California deserts have served as an easy site to illegally dispose of refuse, and as a result, dumps are now widespread. Illegal dumping raises significant concerns regarding public health and safety and the health of the environment. While illegal dumps are an unsightly visual impact, they may contaminate ground water or encourage the improper disposal of hazardous wastes. Illegal dump site may attract ravens that in turn may prey on juvenile desert tortoises, a federally listed species. Additionally, illegal dumps decrease property values on surrounding property which in turn results in decreasing tax revenues collected by the counties. Law enforcement capabilities in the desert are inadequate to effectively address illegal dumping activities. For example, the Bureau of Land Management has approximately one law enforcement ranger for each ½ million acres of public land. In addition, there is no coordinated program involving Federal, State, and local agencies to educate the public about illegal dumping and to implement prevention programs.

Goals and Objectives:

The goal of this project is to clean up and restore illegal dumpsites that pose a public health, safety or environmental threat and to reduce the incidence of illegal dumping in the future.

Task Description:

1. Clean up and restore twenty dumps each year.
2. Implement a program to prevent illegal dumping by (a) educating the public about the problems associated with illegal dumping, (b) enforcing laws related to illegal dumping, (c) providing viable alternatives to illegal dumping, and (d) protecting sites that have been restored.
3. Partnerships with counties, the state, nonprofit organizations and other federal agencies will be continued or created. Funds will be leveraged to the maximum extent possible.

Participating Agencies:

BLM, NPS, EPA, California Integrated Waste Board, Cal Trans, County Governments

Implementation of Desert Tortoise Recovery Actions

Background and Problem Statement:

The desert tortoise recovery plan recommends a conservation strategy to recover and delist the desert tortoise. The primary means of achieving recovery plan objectives will be through the development and implementation of land management plans and coordinated interagency management plans. Because the destruction, degradation, and fragmentation of habitat and loss of individual tortoises from disease and human-related activities are important factors in the decline of the Mojave desert tortoise population, these effects must be controlled within recovery areas in order to achieve recovery. Planning and implementation of recovery plan recommendations requires coordination among managers and researchers across jurisdictional boundaries.

Goals and Objectives: Implement the highest priority actions to stabilize or increase tortoise populations.

Task Description:

1. Develop a 5-year coordinated recovery action plan and budget that will describe and prioritize desert tortoise recovery activities in the California Desert. The 5-year plan will be developed in coordination with the land management agencies, the DMG, and the Management Oversight Group.
2. Implement management actions to benefit recovery of the desert tortoise. Funding will be used to implement recommendations in the Desert Tortoise Recovery Plan that are not being addressed by other DMG initiatives, such as:
 - ◆ implement management actions to address the impacts of predators (e.g., ravens) on desert tortoise;
 - ◆ construct barriers along roads/highways to minimize tortoise mortality;
 - ◆ prevent illegal/incidental take of tortoises through active education and law enforcement programs; and
 - ◆ evaluate the effects of upper respiratory tract disease and shell disease on the desert tortoise and implement recommendations to manage those effects.

Participating Agencies:

FWS, BLM, NPS, DOD, California Department of Fish and Game

Abandoned Mine Lands Reclamation

Background/Problem Statement:

Public Lands in the California Desert have an extensive Abandoned Mine Lands (AML) management problem. Open mine shafts are dangerous to visitors, wildlife and land management agency staff. Some abandoned mill sites contain cyanide tailings that are hazardous to humans, animals, plants and groundwater. Conversely, some sites provide habitat for Threatened and Endangered (T&E) species, and yet others are significant cultural resources.

Abandoned mine lands are a challenge to manage because it requires an understanding of multi-specialty areas to design and implement a cohesive mitigation plan. No individual public entity within the desert has the staffing or technical expertise to fully manage their AML problems alone.

Failure to take action regarding AML reclamation could result in injury or death to agency staff and visitors, contamination of water sources, degradation of historic structures, Wilderness Act conflicts, and harm to T&E wildlife.

Goals and Objectives:

1. Make dangerous mines safe.
2. Rehabilitate mine lands and mitigate toxic waste sites.
3. Protect rare species by installing bat gates.
4. Protect historically/culturally significant mine sites.
6. Obliterate mine workings in wilderness.
5. Re-vegetate reclaimed mine sites.
6. Streamline the environmental compliance process.

Task Description:

1. Identify, Inventory, and Rank Sites. Sites will be identified and inventoried and surveys conducted to identify physical and environmental hazards and wildlife habitat concerns. A comprehensive survey will be conducted to determine mines that are historically or culturally significant. Inventory efforts will be maintained using a GIS database. An evaluation system will be devised to prioritize sites for rehabilitation.
2. Environmental Compliance. Streamlined procedures will be developed for complying with various laws related to reclamation of abandoned mine lands such as the NEPA and the ESA.
3. Rehabilitation will consist of disturbed lands reclamation, construction/installation of safety measures, historic site stabilization or habitat preservation.
4. Public Education and Visitor Safety will provide for protection of sensitive natural and cultural resources and prevent illegal and unsafe entry, vandalism, and theft of artifacts.

Participating Agencies:

BLM, NPS, FWS, DOD, California State Parks

A Regional Handbook of the History and Prehistory of Desert Cultures

Background/Problem Statement:

Over ten thousand years of human presence is documented for the California Deserts. Physical evidence for this very long continuous occupancy is found on lands under federal, state and local government, tribal and private ownership. Many decades of archeological, historical, and other social science research has generated a large amount of information that has not been summarized and evaluated. The project will result in standardized guidance for all lands in the California desert, independent of agency jurisdiction or land ownership.

Goals and Objectives:

1. Provide a summary of American Indian and non-Indian cultural resources information (published and unpublished) associated with the California deserts;
2. Outline basic desert-wide themes of human occupancy and land uses over ten millennia, including impacts;
3. Provide reader-friendly language style, format, and indices for effective use by technical staff and public readership;
4. Provide standardized guidance for effective agency practices to conserve cultural resources consistent with mandates and missions, in coordinated partnerships utilizing the GIS historical resources database that has been completed for the desert;
5. Outline steps for proper consultation between tribal governments and Federal, State and local governments in the California deserts to meet State, Federal Executive Branch, and Congressional directives.
6. Provide cultural tourism recommendations to enhance public enjoyment in the California desert region.

Participating Agencies:

BLM, NPS, Local Museums, Tribes

Visitor Service and Education

The adjoining desert regions of California, Arizona and Nevada lay within a one-day drive for over 40 million people. As individuals and groups they come to the desert to enjoy its myriad recreation opportunities. The majority of these visitors are unaware and for the most part unconcerned with seemingly arbitrary agency boundaries. Who actually manages these lands is secondary to the visitors' enjoyment. They just want to know where they can go, what they can do when they get there and what is expected of them while they are there. Due to the huge governmental presence in the desert it is imperative that land management agencies work in collaboration with each other to provide seamless recreation services to the public.

Visitor education is another crucial component of the services we must provide. Unfortunately, many visitors see the desert as a wasteland -- a place to use as a dump, a place to engage in inappropriate activities. There is an immediate and long-term need for environmental education.

Goals and Objectives:

1. Educate the public about the value and importance of desert resource to promote a conservation ethic.
2. Provide "seamless" recreation services to the public (services that are not confused by agency jurisdictions).
3. Provide the public with ready access to useful, comprehensive, and consistent information about desert resources, recreation opportunities, desert safety, etc.
4. Ensure the success of desert restoration efforts by developing effective public outreach programs

Task Description:

1. Maintain the multi agency desert information web site and develop/maintain accompanying exhibits. This web page will provide desert wide information to visitors on trip planning, what to see and do, cultural activities, annual events, driving tours, wildflowers, geology, wildlife, history, aviation and aerospace, travel hints, safety, gas, food and lodging, weather, nature, colorful characters, rules, access, wilderness, etc.
2. Research and evaluate feasibility of one-phone number that will allow the visitor to access each agency's reservation system.
3. Design and produce appropriate information/education materials.
4. Develop and implement a public education strategy.

Participating Agencies:

BLM, NPS, DOD, California State Parks

Public Safety and California Desert Lands Protection

Background and Statement of Problem

This comprehensive budget proposal will strengthen the Desert Wide efforts to effectively protect California Desert resources while providing safe and enjoyable recreational experiences for the public. The California Desert public lands include more than 20 million acres. Currently the Bureau of Land Management has 30 commissioned Rangers and the National Park Service has 31 commissioned Park Rangers in the California Desert. The U.S. Fish and Wildlife Service and the Bureau of Indian Affairs also have small Resource Protection staffs. California State Parks and Fish and Game also have a small staff of Rangers and Wardens. Increased funding to the Desert Management Agencies is desperately needed for a coordinated resource protection strategy that will improve visitor services, enhance public safety, protect natural and cultural resources and provide public education.

Rangers from Federal and State Agencies are protecting huge desert areas. They do this with one-person patrols and are constantly at risk. They increasingly encounter resource violations and public safety threats, including; resource theft; weapons violations; drug manufacturing labs; illegal public gatherings, wildlife crime, hazardous material dumping and illegal off-road vehicle use. These Rangers are responding to incidents with poor or non-existing communications, inadequate equipment and no reasonable back up response. Funding is needed to adequately provide for employee safety, protect resources, and provide for public safety, education and emergency response.

Goals and Objectives: Enhance the safety of desert visitors and the protection of desert resources by improving the effectiveness of Federal and State rangers/wardens.

Task Description:

1. Provide an increased multi-agency response capability
2. Provide a mobile office capability for patrol wardens and rangers
3. Enhance mobile communications capabilities
4. Construct a new Federal Interagency Communications Center building in partnership with the U.S. Forest Service.

Participating Agencies:

BLM, NPS, California Department of Fish and Game, California State Parks, Forest Service

Range-wide Desert Tortoise Monitoring

Background:

The most prominent species protected under the ESA in the California deserts is the desert tortoise. The desert tortoise occurs over large portions of the desert and is a significant factor affecting public and private land use in many areas. For example, the use of livestock grazing on public lands is currently being challenged based on its potential impact to the desert tortoise. The desert tortoise is also a major issue related to the proposed expansion of the Fort Irwin Army National Training Center. While the tortoise is a prominent factor throughout the desert, there is no coordinated program to monitor the status and trend in tortoise populations .

Goals and Objectives:

To implement a comprehensive desert tortoise monitoring program that will provide reliable population density estimates for use in determining progress towards recovery.

Task Description:

1. Implement line distance sampling procedures throughout the range of the tortoise.
2. Evaluate monitoring efforts and modify, as necessary.
3. Coordinate and administer the monitoring program; manage the database; produce annual reports; coordinate desert tortoise monitoring with other regional and landscape-level monitoring efforts; and evaluate the effectiveness of management actions in recovery areas.

Participating Agencies:

FWS, BLM, NPS, USGS, DOD, California Department of Fish and Game,

Integrated Ecological Monitoring of the California Deserts

Background:

Balancing military readiness, resource use, housing, recreation, waste disposal, habitat protection, and economic opportunities in the back yards of the nations second and sixth largest urban areas of Los Angeles and San Diego demands strong integrated science to make decisions that will promote the long-term sustainability of desert resources. It is especially important to know the condition of the resource and how that condition is changing in response to management actions and natural and human change.

Goals and Objectives:

The objective is develop and implement a comprehensive ecological monitoring program is to assess the conditions land, air, water resources across the entire California desert.

Task Description:

1. Clearly define the goals of the monitoring program.
2. Assess existing monitoring strategies within the desert.
3. Develop a conceptual model of how the ecological system functions.
4. Identify key "stressors" of the system and candidate indicators.
5. Design and implement a practical and scientifically sound monitoring effort.
6. Implement the monitoring program; modify based on results.
7. Link monitoring results to management actions.

Participating Agencies:

USGS, BLM, NPS, California State Parks, DOD

Mojave Desert Recoverability and Vulnerability Project

Background:

Scientists and land managers have long observed that certain desert lands are much more susceptible to human disturbance, and once disturbed recover at vastly different rates. An interdisciplinary study effort was initiated to determine which parts of the desert are most vulnerable to human disturbance, which parts are likely to recover fastest, and which parts will never recover. The studies will provide the basis for models that can be employed by land managers to predict which landscape sites are most vulnerable to disturbance and which sites are more likely to recover.

Goals and Objectives:

The goals of the project are to: (1) maximize the chances of success for desert restoration by assessing site recoverability; and (2) minimize continued desert degradation by assessing site vulnerability to disturbance.

Task Description:

1. Determine recoverability of disturbed sites: Examine sites for which disturbances can be dated (abandoned mining towns, vehicle tracks) by measuring soil compaction, resistance to wind erosion, vegetation composition and cover, etc.
2. Compare measurements to control sites: Determine relative rates of recoverability sufficient to construct a predictive model.
3. Map physical characteristics of sites: Use Geographic Information System (GIS) database of natural and cultural resources to characterize sites.
4. Analyze data: Relate recoverability rates to physical characteristics of sites that will allow prediction of recovery for similar sites.
5. Extend results: Supplement GIS with additional remote sensing data to map the most relevant physical characteristics of sites desert-wide.
6. Create predictive models: Based upon the best scientific understanding, create models that will predict recovery rates and vulnerability of sites to disturbance.
7. Incorporate climatic variation: Create dynamic models that could be driven by seasonal or short-term climatic perturbations (El Niño).
8. Apply to desert restoration: Work with the upland and riparian habitat restoration project to choose the most appropriate restoration treatments and sites.
9. Apply to land management: Work with desert managers to utilize these models to assess likely impacts of land use decisions on particular sites.
10. Apply to monitoring: Assist ecological monitoring project in selecting appropriate indicators that will allow the recoverability and vulnerability models to be improved over time based on measured results.

Participating Agencies:

USGS, BLM, NPS

Desert Water Resources

Background and Problem Statement:

Wetland and riparian habitats in the California Desert are highly significant because they are rich in bio-diversity, support numerous endangered, threatened and sensitive/endemic species, and provide desirable recreational opportunities for visitors.

Human activities in the California Desert over the last century have for the most part been directly associated with its limited water resources. The human occupation of springs and development of ground water resources has resulted in dramatic impacts to natural spring areas. Rapid population expansion are resulting in dramatic increases in the development of finite water resources.

Insufficient hydrologic and biological data is available to adequately understand the complexities of the California Desert Management Area ground water aquifer systems and their associated biological resource values. Lack of adequate documentation and data analysis restricts management's ability to readily analyze, respond to, and deal with potential threats to water resources or generate long range management policy. cursory information suggests water and water dependent resources are being degraded, affected, or lost across a large portion of the desert. Baseline documentation and analysis are essential to formulate management policies that provide protection of the desert's finite water and water-dependent resources. This funding request will provide for the collection of a quality assured data base and its analysis, enabling the generation of recommendations for sound management, and the conservation of resources under the stewardship of the Department of the Interior and the Department of Defense.

Goals and Objectives:

The ultimate goal of the project is to develop recommendations for the long-term management and protection of the desert's water resources. The project objectives are to compile a uniform database of water and water-dependent biological resources, conduct in-depth analysis of the data, and compile a comprehensive report on the results of the analysis.

Task Description:

- 1) Data compilation and synthesis: Begin compilation and organization of existing hydrologic data into spatial database. Merge with existing GIS.
- 2) Develop conceptual model: Develop preliminary conceptual model based on available data and current understanding of regional system.
- 3) Develop monitoring programs:
 - (a) Water chemistry/quality (ground water, springs, surface water, precipitation)
 - (b) Water levels (establish real time water level monitoring in selected locations)
 - (c) Discharge (evapo-transpiration, transpiration, and springs)
 - (d) Water Use (pumping from wells, irrigation)
 - (e) Surface water gaging (flow rate and frequency)
- 4) Water budget: Begin compilation of components of water budget for groundwater flow system (recharge, discharge, and change in storage).

- 5) Climate: Begin evaluation of role of climate on water budgets.
- 6) Spring surveys (biological)/ecological synopsis. Consolidate existing distribution data for significant, unique, or rare water dependent plant and animal species. Consolidate existing ecological data that would demonstrate the dependence of biological systems on stable water supplies.
- 7) Map wetland and riparian habitats in the California desert; develop a GIS data base.
- 8) Threat synopsis: Develop preliminary synopsis of threats that have the potential to degrade, impact, or affect water-dependent biological resources in the desert.

Participating Agencies:

USGS, BLM, NPS, FWS, DOD, California Department of Water Resources, County Governments, Local Water Districts.