SNPLMA Round 16 Conservation Initiative Proposal

Endemic and Sensitive Species Biological Mitigations for
Spring Mountains National Recreation Area Capital Improvement Projects

$734,200.00

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Abbreviations/Acronyms

BLM	Bureau of Land Management
CIP	Capital Improvement Project
FS	Acronym assigned by Bureau of Land Management Southern Nevada Public Lands Management Act division to Forest Service projects
NEPA	National Environmental Policy Act
Sensitive species	Federally Endangered, USFS Region 4 Sensitive and SMNRA Conservation Agreement plant and wildlife species
SNCWMA	Southern Nevada Cooperative Weed Management Area
SNPLMA	Southern Nevada Public Lands Management Act
SMNRA	Spring Mountains National Recreation Area
USFS	U. S. Forest Service

I. Introduction and Background

Preceding Southern Nevada Public Lands Management Act (SNPLMA) nominations for the U. S. Forest Service included a number of Capital Improvement Projects (CIP) for the Spring Mountains National Recreation Area (SMNRA) whose goals included the construction or reconstruction of developed recreational facilities on the SMNRA. During project planning, the construction plans for most recreational facilities required redesign and relocation of infrastructure within existing developed site boundaries. The designs and locations of infrastructure impacted individuals and habitats of a federally endangered wildlife species and multiple Region 4 Sensitive and SMNRA Conservation Agreement plant and wildlife species (collectively referred to as 'Sensitive species' for the remainder of the document). In order to minimize the loss of individuals and habitats, decisions made through the National Environmental Policy Act (NEPA) process for the projects included mitigations to reduce long-term impacts to the species' populations.

During development of the construction contracts, the SMNRA learned that Bureau of Land Management's (BLM) SNPLMA division did not consider the mitigations a part of the original CIP nominations. The BLM SNPLMA division informed the SMNRA that Sensitive species mitigations not covered under the CIP nominations would need to be submitted as a separate nomination to SNPLMA for future funding.

Prior CIP nominations for which outstanding biological mitigations exist include:

- Cathedral Rock Trail, Overlook, Restroom and Parking Improvements Project (5-14 FS25)

- Cathedral Rock Picnic Area Renovation Projects (5-21 FS26; 6-4 FS28)
- Upper Kyle Canyon Day Use Complex (3-24 FS14)
- Kyle Canyon Administrative and Visitor Complex (Project Record of Decision includes the Kyle Canyon Campground Renovation, Kyle Canyon Administrative Complex, and Spring Mountains Visitor Gateway Complex) (3-14 FS09; 4-2 FS16; 5-10 FS23; 6-12 FS31)
- Foxtail Group Picnic Area Rehabilitation Project (6-17 33)
- Dolomite and McWilliams Campground Renovation Project (6-9 FS29)
- Old Mill Picnic Area Reconstruction (11-1 FS41)

II. Purpose Statement

Spring Mountains National Recreation Area (SMNRA) of the Humboldt-Toiyabe National Forest proposes implementation of Endemic and Sensitive Species Biological Mitigations for SMNRA Capital Improvement Projects (CIP). Through the National Environmental Policy Act (NEPA) process, the SMNRA developed biological mitigations to minimize the impacts the Southern Nevada Public Lands Management Act (SNPLMA) CIPs had on biological resources in the delineated Project Areas. These biological mitigations include one-time actions that in the long term assist in the recovery of lost Sensitive species habitat and protection of remaining Sensitive species and their habitats. This project also includes education, outreach and volunteer opportunities that promote long-term stewardship and a shared responsibility for the Sensitive species' persistence amongst the general public, specifically user groups accustomed to recreating in the Project Areas.

Who

This proposal is a project put forth by the SMNRA of the Humboldt-Toiyabe National Forest.

Where -Location

The Project Areas for Endemic and Sensitive Species Biological Mitigations for SMNRA CIPs are located in the SMNRA, Humboldt-Toiyabe National Forest, in Clark County, Nevada, in the 4th Congressional District. Project areas are located roughly 20-25 aerial miles northwest of Las Vegas, Nevada. The Project Areas occur on National Forest System lands in Kyle and Lee canyons (Figure 1). The Project Areas are located at:

- Cathedral Rock Trail, Overlook, Restroom and Parking 36°15'25.16"N 115°38'54.49"W
- Cathedral Rock Picnic Area 36°15'24.47"N 115°38'42.45"W
- Upper Kyle Canyon Day Use Complex 36°15'56.40"N 115°39'30.71"W
- Kyle Canyon Administrative and Visitor Complex 36°16'17.83"N 115°35'17.46"W
- Foxtail Group Picnic Area 36°19'02.98"N 115°40'17.56"W
- Dolomite and McWilliams Campground 36°18'28.73"N 115°40'54.99"W
- Old Mill Picnic Area 36°19'09.29"N 115°40'36.98"W

In addition, noxious weeds located in close proximity to these locations can easily spread into the Project Areas and nearby Sensitive species habitats. Noxious weeds in adjacent areas may easily spread into the Project Areas and Sensitive species habitats by people traveling through the

noxious weeds occurrences and unwittingly carrying propagules into the watershed. Areas adjacent to, but not within the immediate boundaries of these Project Areas may be included as part of the Project Areas should we determine a vector exists for noxious weeds to spread into the Project Areas and associated Sensitive species' habitats.

What

The proposal includes implementation of biological mitigations for seven (7) SMNRA CIP Project Areas to assist the natural recovery of Sensitive species and their habitats; treatment of non-native invasive weeds in the Project Areas and in access corridors where the weeds easily spread into the Project Areas; post-implementation monitoring for short-term effectiveness of biological mitigations; and public education and outreach events aimed to inform visitors of the sensitivity of the areas.

Why

The Spring Mountains ecosystem is a 'sky island' of montane endemism isolated from similar mountain ranges by low elevations deserts that serve as barriers to migrations of cooler and more mesic-adapted plant and animal species. Based on current taxonomy, the Spring Mountains harbors 23-25 endemic flora and fauna found nowhere else on Earth. The habitats occupied by many of these locally endemic and other rare organisms are often small and isolated, making these species more vulnerable to local extinction by both human activities and natural random events such as fire and floods. In the Project Areas for Endemic and Sensitive Species Biological Mitigations for SMNRA CIPs, known occurrences and habitats of Sensitive species include:

Cathedral Rock Trail, Overlook, Restroom and Parking	Rough angelica Spring Mountains acastus checkerspot Spring Mountains dark blue butterfly Morand's checkerspot Charleston violet
Cathedral Rock Picnic Area	Rough angelica Spring Mountains dark blue butterfly Charleston violet
Upper Kyle Canyon Day Use Complex	Rough angelica Spring Mountains acastus checkerspot
Kyle Canyon Administrative and Visitor Complex	Spring Mountains acastus checkerspot Rough angelica Clokey milkvetch Clokey's greasebush Jaeger's ivesia
Foxtail Group Picnic Area	Mt. Charleston blue butterfly King's rosy sandwort Clokey's eggvetch

	Charleston Mountain goldenbush Charleston grounddaisy Charleston violet
Dolomite and McWilliams Campground	Mt. Charleston blue butterfly King's rosy sandwort Charleston Mountain goldenbush Clokey mountain sage Charleston grounddaisy Charleston violet
Old Mill Picnic Area	Mt. Charleston blue butterfly King's rosy sandwort Charleston Mountain goldenbush Clokey mountain sage Charleston grounddaisy Charleston violet

Outcome

Completion of Endemic and Sensitive Species Biological Mitigations for SMNRA CIPs will improve post-construction species and habitat recovery. Sensitive species and their habitats recover, minimizing long-term impacts to population viability and habitat quality. These actions support compliance with the General Management Plan for the SMNRA, an amendment to the Land and Resource Management Plan for the Toiyabe National Forest, and SMNRA Conservation Agreement by ensuring appropriate conservation and management of natural and recreation resources for the preservation of the natural and biological diversity in the Spring Mountains.

This project also includes education, outreach and volunteer opportunities that promote long-term stewardship and a shared responsibility for the Sensitive species' persistence amongst the general public, specifically user groups accustomed to recreating in the Project Areas. Through the promotion of long-term stewardship, we increase public awareness for the sensitivity of and unique nature of the Spring Mountains. Project Areas we currently identify for education programs and volunteer restoration projects include: Cathedral Rock Trail, Overlook, Restroom and Parking; Cathedral Rock Picnic Area; and Kyle Canyon Administrative and Visitor Complex. Depending on the long-term stewardship messages and opportunities available, we may also hold events in other Project Areas. Appropriate activities for volunteers will include, but not be limited to: native and Sensitive species seed collections; outplantings of seeds or seedlings; unauthorized trail closures; and Science Safaris or Citizen Science Days.

III. Need for the Project

The project addresses the following Executive Committee values:

Sustainability

This project promotes long-term sustainability by emphasizing healthy and resilient landscapes for future generations by assisting the natural recovery of Sensitive species and their habitats. Upon completion of the project, the natural recovery will continue unassisted, providing a benefit beyond the 5-year funding. Through inclusion of education, outreach and volunteer opportunities, the project promotes long-term stewardship and a shared responsibility for its maintenance amongst the general public, specifically user groups accustomed to recreating in the Project Areas. Addressing recreation impacts and authorized uses through education and outreach will reduce long-term human impacts as the habitats recover.

Connectivity

This project promotes connectivity between people and their natural environment. This project simultaneously provides for increased awareness of the sensitivity of natural and cultural resources in the general public and improved quality of natural and cultural resources through conservation of Sensitive species and their habitats. This project will promote long-term stewardship in the Las Vegas community at large by working with private and public partners, through which we would receive support for volunteer and staff labor. In return, we anticipate the public community would develop an increased awareness and appreciation for the recovery and sensitivity of Sensitive species and their habitats through educational programs and products.

Community

This project improves the quality of life for the human community and the integrity of biological communities. In addition to promoting long-term stewardship, this project will only be successful with the support of private and public partners. Partnerships will be essential to the implementation of the project for support with volunteer and staff labor, supplies, and knowledge of available resources. Traditionally, we work with partners to complete project-level NEPA biological and cultural surveys; develop plant materials; implement labor such as seeding, planting; and effectiveness monitoring protocols development and execution.

This project will work with existing governmental partnerships, including but not limited to SNAP teams such as Volunteer and Education, Recreation, Restoration, Science, and GIS teams. We will also work closely with the Southern Nevada Cooperative Weed Management Area (SNCWMA) in identifying effective weeds prevention, public education opportunities, and treatments for non-native invasive species observed in Project Areas. The SNCWMA is partnership of private landowners, public and private land managers and groups dedicated to non-native invasive weed control in Southern Nevada. Potential State agency partners for which we already established relationships in Sensitive species conservation include Nevada Natural Heritage Program and Nevada Division of Forestry, both divisions of Nevada Department of Conservation and Natural Resources.

Potential non-governmental partners with which we already established relationships include Friends of Nevada Wilderness, Go Mt. Charleston, Southern Nevada Conservancy, Great Basin Institute, Nevada Conservation Corps, and Nuwuvi Nation. As part of the tribal consultation

process, we will work with the Nuwuvi Nation, composed of representatives from seven tribes of the Southern Paiute, which consider the Spring Mountains their place of origin, to ensure we are aware of and protect sacred sites within the project areas. We will also request the Nuwuvi Nation to perform blessings before we commence any on-the-ground work and also blessings when we complete work.

IV. Project Timeframe

The project will occur over a 5-year (60-month) time period with anticipated benchmarks:

Year 1 – Develop implementation plan
Initiate plant materials development
Initiate noxious weeds treatments
Year 2 – Complete biological resurveys
Develop implementation strategies with existing and potential partners
Initiate implementation of outstanding biological mitigations, including appropriate volunteer and education activities
Initiate cultural sites monitoring during implementation
Year 3 – Continue implementation of outstanding biological mitigations, including appropriate volunteer and education activities
Continue cultural sites monitoring during implementation
Monitor/assess completed biological mitigations for short-term effectiveness
Year 4 – Complete implementation of outstanding biological mitigations
Continue volunteer and education activities
Continue cultural and biological monitoring for short-term effectiveness
Year 5 – Complete biological monitoring for short-term effectiveness and relative recovery

V. Project Deliverables

Primary Deliverables

Primary Deliverable 1: Assisted natural recovery of Sensitive species and their habitats through implementation of biological mitigations in previous CIP Project Areas.

Anticipated deliverables for this may include:

- Restoration of habitat for Threatened and Endangered species;
- Restoration of habitat for non-listed Sensitive species; and
- Treatment of invasive plant species.

These deliverables may include, but not be limited to seed planting, bare root transplants, fencing or barriers installation, unauthorized trail closures, and herbicide or hand pulling of invasive plants. We will assess effectiveness of all proposed activities for success based on past experiences in similar topography and vegetation communities on National Forest System lands.

Given the blend of topography and vegetation communities in the project areas, the nature of restoration and invasive species treatments will be site-specific and may differ between sites.

Primary Deliverable 2: Increase visitor awareness and appreciation for the recovery and sensitivity of Sensitive species and their habitats through educational programs and products.

Anticipated deliverables for this may include:

- Host a minimum of 10 educational and volunteer activities that involve members of the general public in active restoration of the habitats.

Project Areas we currently identify for education programs and volunteer restoration projects include: Cathedral Rock Trail, Overlook, Restroom and Parking; Cathedral Rock Picnic Area; and Kyle Canyon Administrative and Visitor Complex. Depending on the long-term stewardship messages and opportunities available, we may also hold events in other Project Areas. Appropriate education and volunteer activities include, but are not limited to: native and Sensitive species seed collections; outplantings of seeds or seedlings; unauthorized trail closures; and Science Safaris or Citizen Science Days.

Anticipated Deliverables

In addition to the anticipated deliverables listed above, we may complete the following anticipated deliverables for project development and completion:

- Surveys and inventories for invasive plant species (approximately 1,730 acres);
- Monitoring of cultural/paleontological resources; and
- GIS databases or map layers (minimum one GIS product each for cultural monitoring, rare plant resurveys and monitoring, wildlife habitat delineations, invasive plant inventories and treatments, and restoration treatment areas).

Standard Deliverables

Standard deliverables for this project include:

- Comprehensive implementation plan
- Annual monitoring reports for biological, education and volunteer activities
- Final report on short-term effectiveness

VI. Relevant Performance Measures

Sensitive Species Habitat Restoration
Outcome of Primary Deliverable 1: Assisted recovery of Sensitive species and their habitats through biological mitigations that aide natural restoration of soil and vegetation communities and reduce human-influenced disturbances in Sensitive habitats. Recover Sensitive species at the habitat level.

Output (Primary Deliverable): Implement a variety of actions to assist in natural recovery of Sensitive species and their habitats within approximately 1,730 acres of Project Areas. We will further refine the treatment acres within the first year of the project and provide to the SNPLMA program once we complete resurveys. SNPLMA Performance Measures include:

Performance Measure H4 - Acres of Upland Habitat Treated, Enhanced, or Restored
Performance Measure H15- Number of Conservation Actions Implemented for Non-Listed Species

Output (Anticipated Deliverable): Rapid response treatments of known invasive plant species occurrences and new invasions when detected through project-level inventories. This deliverable will be open-ended quantitatively since the sizes of-undetected invasions are currently unknown. SNPLMA Performance Measure is:

Performance Measure H9 - Acres of Invasive Plant Species Treated or Restored

Outcome of Primary Deliverable 1: Increase knowledge base of biological resources within the Project Area. Improve information base for making informed decisions and developing sound actions that minimize impacts to biological resources through avoidance as well as indirectly protecting through project design criteria. Achieving the following output will accomplish this outcome:

Output (Anticipated Deliverable): Survey, inventory and monitor biological resources, including rare plant and wildlife habitats and invasive species occurrences, within the Project Areas. The SNPLMA Performance Measures include:

Performance Measure H5 - Acres of Upland Habitat Surveyed, Inventoried or Monitored
Performance Measure H10 - Acres of Invasive Plant Species Surveyed, Inventoried, or Monitored

Cultural / Paleontological Resources
Outcome of Primary Deliverable 1: Increase knowledge base of cultural/paleontological resources within the Project Areas. Improve information base for making informed decisions and developing sound actions that minimize impacts to cultural resources through avoidance. Achieving the following output will accomplish this outcome:

Output (Anticipated Deliverable): Monitor cultural and paleontological resources within the Project Areas. The SNPLMA Performance Measure is:

Performance Measure C3 - Acres of Cultural / Paleontological Resources Surveyed, Inventoried or Monitored

Public Education and Outreach

Outcome of Primary Deliverable 3: Increase visitor awareness and appreciation for the recovery and sensitivity of Sensitive species and their habitats through educational programs and products. Achieving the following outputs will accomplish this outcome:

Output (Anticipated Deliverable): Conduct a minimum of 10 educational restoration activities that involve volunteers from the general public. The SNPLMA Performance Measures include:

Performance Measure O5 - Number of Outreach Contacts Made
Performance Measure O7 - Number of Interpretive or Education Presentations Given and/or Community Events Participated In or Hosted
Performance Measure O10 – Number of Volunteers Used

GIS Products

Outcome of Primary Deliverables 1 and 2: Develop and finalize GIS databases or map layers biological resurveys, biological and cultural monitoring, and treatment areas. Achieving the following output will accomplish this outcome:

Output (Anticipated Deliverable): At least one GIS product each will be finalized for cultural monitoring, rare plant resurveys and monitoring, wildlife habitat delineations, invasive plant inventories and treatments and restoration treatment areas. The SNPLMA Performance Measure is:

Performance Measure O9 – Number of GIS Databases Generated and/or Map Layers Produced

VII. Project Implementation Process

Project implementation will commence with the development of a comprehensive implementation plan. Once we complete a comprehensive implementation plan, we will begin plant materials development and biological resurveys. Biological resurveys will confirm Sensitive species population boundaries to help refine the implementation plan, and will be summarized in survey reports and inventories. We will work with existing and potential partners to implement treatment actions within the first few years of the project.

Treatment actions will be documented through appropriate corporate databases, including the interagency Disturbance Inventory and Restoration Tracking (DIRT) geodatabase & protocol developed through the SNPLMA Rounds 4, 5, & 6 Habitat Restoration Conservation Initiatives.

Monitoring activities for biological and cultural resources that assess the short-term effectiveness of restoration actions will be summarized in annual reports. Education and volunteer actions will be summarized in annual reports.

We will develop a final report assessing short-term effectiveness and predicting long-term trajectories for biological mitigation actions and education and volunteer activities. Survey results and monitoring reports will be reported in agency corporate databases as well as shared with respective State agencies (SHPO, Nevada Natural Heritage Program, NDOW, etc.) through established networks.

VIII. Level of Readiness for Project Implementation

The SMNRA will develop a comprehensive implementation plan for longer-term restoration actions in the Project Areas on approximately 1,730 acres. These actions may be implemented when funds are received as these actions are covered under previous NEPA decisions for construction and reconstruction of developed recreational facilities (see following section). The Humboldt-Toiyabe National Forest currently has key staff positions filled that are essential to developing the comprehensive implementation plan and initiating restoration actions.

IX. Relationship to Previous Phases and Anticipated Future Phases

The Endemic and Sensitive Species Biological Mitigations for SMNRA CIPs is a stand-alone project intended to improve the natural recovery of Sensitive species populations and their habitats post-construction. Past SNPLMA nominations for which the NEPA required the biological mitigations include:

- Cathedral Rock Trail, Overlook, Restroom and Parking Improvements Project (5-14 FS25)
- Cathedral Rock Picnic Area Renovation Projects (5-21 FS26; 6-4 FS28)
- Upper Kyle Canyon Day Use Complex (3-24 FS14)
- Kyle Canyon Administrative and Visitor Complex (Project Record of Decision includes the Kyle Canyon Campground Renovation, Kyle Canyon Administrative Complex, and Spring Mountains Visitor Gateway Complex) (3-14 FS09; 4-2 FS16; 5-10 FS23; 6-12 FS31)
- Foxtail Group Picnic Area Rehabilitation Project (6-17 33)
- Dolomite and McWilliams Campground Renovation Project (6-9 FS29)
- Old Mill Picnic Area Reconstruction (11-1 FS41)

Past SNPLMA nominations that benefited these project areas and Sensitive species, but are not directly related to this nomination, include interagency Habitat Restoration nominations from Rounds 4, 5, & 6 (SNPLMA Priorities 4-11, 5-3, and 6-7). These rounds improved Sensitive species habitats through invasive plant species inventories and treatments, identification, closure

and restoration of unauthorized motorized routes and dispersed camp sites, forest health and habitat enhancement treatments, and native seed collections.

X. Proposed Project Budget

The projected budget for the SMNRA to implement all facets of this project is $734,200.00. A Cost Estimate Summary sheet for the Humboldt-Toiyabe National Forest is included in Appendix A of this nomination. The break-down of yearly expanded budgets is included in the nominations package for this project.

Non-SNPLMA Funds

We will strive to develop additional non-SNPLMA funding sources when the project begins but do not currently have any matching funds committed at this time. As described in III. Need for the Project – Community, existing partnerships exist with which we may be able to develop additional non-SNPLMA funding sources.

In-kind Contributions

Based on past attendance at previous volunteer seed collection and planting, we anticipate in-kind contributions of volunteer labor through community-wide restoration activities of $5,000 (based on the Department of the Interior's volunteer labor valuations of $21.36 per hour).

Best Value Option

Through completion of biological mitigations for previous SNPLMA projects, this project continues the intent of SNPLMA nominations to simultaneously provide for increased awareness of the sensitivity of natural and cultural resources in the general public and improved quality of natural and cultural resources through conservation of Sensitive species and their habitats. This project aims to accomplish this by reducing impacts to natural resources caused by the increased numbers and altered use patterns of people recreating in the Project Areas. This project will focus actions at the habitat-level and incorporate activities evaluated over the years as effective tools for improving and restoring habitats. SNPLMA funding sources also provide opportunities to work with public entities or incorporate educational and volunteer activities for the general public. This project will promote long-term stewardship in the Las Vegas community at large by working with private and public partners, through which we would receive support for volunteer and staff labor. In return, we anticipate the public community would develop an increased awareness and appreciation for the recovery and sensitivity of Sensitive species and their habitats through educational programs and products.

XI. Conservation Initiatives Ranking Criteria

In the narrative provided above, this project meets the following ranking criteria identified for SNPLMA Round 16 Conservation Initiatives Nominations:

1. ***Supports one of the three priority types of projects:***

a. ***Habitat Enhancement:*** Through implementation of biological mitigations, Sensitive species and their habitats are recovered in areas impacted by construction activities. Species whose habitats the recreational facilities SNPLMA CIPs directly impacted include: Mt. Charleston blue butterfly, Spring Mountains acastus checkerspot, Spring Mountains dark blue butterfly, Morand's checkerspot, rough angelica, King's rosy sandwort, Clokey milkvetch, Clokey's eggvetch, Clokey's greasebush, Jaeger's ivesia, Charleston Mountain goldenbush, Clokey mountain sage, Charleston grounddaisy, and Charleston violet.

2. ***Includes public outreach and education as a component through volunteer and partnership coordination and projects that incorporate modern outreach efforts and techniques through social media platforms.***
This project includes a primary deliverable to increase visitor awareness and appreciation for the recovery and sensitivity of Sensitive species through educational programs and volunteer restoration projects. This deliverable provides the flexibility for personnel to use the latest technologies and social media platforms for education outreach. Through inclusion of education, outreach and volunteer opportunities, the project promotes long-term stewardship and a shared responsibility for its maintenance amongst the general public, specifically user groups accustomed to recreating in the Project Areas. Addressing recreation impacts and authorized uses through education and outreach will reduce long-term human impacts as the habitats recover.

Project Areas we currently identify for education programs and volunteer restoration projects include: Cathedral Rock Trail, Overlook, Restroom and Parking; Cathedral Rock Picnic Area; and Kyle Canyon Administrative and Visitor Complex. Depending on the long-term stewardship messages and opportunities available, we may hold events in other Project Areas as well. Appropriate activities for volunteers will include, but not be limited to: native and Sensitive species seed collections; outplantings of seeds or seedlings; unauthorized trail closures; and Science Safaris or Citizen Science Days.

3. ***Supports priority sub-types, including:***
   a. ***2. Habitat Enhancement – Endangered Species:*** This project improves habitat resiliency through recovery of impacted habitats in close proximity to recreational developments for the federally endangered Mt. Charleston blue butterfly.
   5. Habitat Enhancement – Invasive Species Treatment and/or Control (Plant or Animal): This project improves Sensitive species habitat quality in part through inventory and treatment of invasive plant species in and immediately adjacent to the Project Areas.
   a. ***6. Habitat Enhancement – Restoration of Habitat for Sensitive Species at the watershed or landscape level:*** The focus of this project is restoration of Sensitive species and their habitats. Through implementation of biological mitigations, Sensitive species and their habitats are recovered in areas impacted by construction activities. Species whose habitats the recreational facilities SNPLMA CIPs directly impacted include: Mt. Charleston blue butterfly, Spring Mountains acastus checkerspot, Spring Mountains dark blue butterfly, Morand's checkerspot, rough angelica, King's rosy sandwort, Clokey milkvetch, Clokey's eggvetch, Clokey's

greasebush, Jaeger's ivesia, Charleston Mountain goldenbush, Clokey mountain sage, Charleston grounddaisy, and Charleston violet.

9. Cultural – project includes tribal involvement and/or consultation: As part of project development and the tribal consultation process, we will work with the Nuwuvi Nation, composed of representatives from seven tribes of the Southern Paiute, that consider the Spring Mountains their place of origin, to perform blessings before we commence any on-the-ground work and also blessings when we complete work.

b. 19. Safety and Public Health – Project addresses and mitigates adverse impacts to resources caused by the volume of people using the resource: Redesigns and relocations of infrastructure within existing developed site boundaries and development of new recreation facilities fragmented populations and habitats for several Sensitive species. New developments and redesigns of existing developments also increase numbers and alter use patterns of people recreating in the Project Areas, increasing potential for new use patterns to further fragment populations and habitats.

This project aims to minimize long-term impacts from increased numbers and altered use patterns of visitors by implementing biological mitigations developed during CIP planning. This project simultaneously provides for increased awareness of the sensitivity of natural and cultural resources in the general public and improved quality of natural and cultural resources through conservation of Sensitive species and their habitats. In return, we anticipate the public community would develop an increased awareness and appreciation for the recovery and sensitivity of Sensitive species and their habitats in the Project Areas through educational programs and products.

4. Enhances partnerships by:

a. Involving individual citizen groups or organizations in the development and accomplishment of resource management goals and other activities during project implementation: This project will only be successful with the support of private and public partners. Partnerships will be essential to the implementation of the project for support with volunteer and staff labor, supplies, and knowledge of available resources. Partnerships would provide us with the capacity to organize and implement biological mitigations and offer education and volunteer activities including, but are not limited to: native and Sensitive species seed collections; outplantings of seeds or seedlings; unauthorized trail closures; and Science Safaris or Citizen Science Days.

Potential non-governmental partners with which we already established relationships include Friends of Nevada Wilderness, Go Mt. Charleston, Southern Nevada Conservancy, Great Basin Institute, Nevada Conservation Corps, and Nuwuvi Nation. As part of the tribal consultation process, we will work with the Nuwuvi Nation, composed of representatives from seven tribes of the Southern Paiute, which consider the Spring Mountains their place of origin, to ensure we are aware of and protect sacred sites within the project areas. We will also request the Nuwuvi Nation to

perform blessings before we commence any on-the-ground work and also blessings when we complete work.

c. ***Involving non-Federal public partners:*** This project will promote long-term stewardship in the Las Vegas community at large by working with private and public partners, through which we would receive support for volunteer and staff labor. In return, we anticipate the public community would develop an increased awareness and appreciation for the recovery and sensitivity of Sensitive species and their habitats through educational programs and products.

   Public partners may include the SNCWMA and State entities; additional public partners may be included should opportunities arise. We will work closely with the SNCWMA in identifying effective weeds prevention, public education opportunities, and treatments for non-native invasive species observed in Project Areas. The SNCWMA is partnership of private landowners, public and private land managers and groups dedicated to non-native invasive weed control in Southern Nevada. Potential State agency partners for which we already established relationships in Sensitive species conservation include Nevada Natural Heritage Program and Nevada Division of Forestry, both divisions of Nevada Department of Conservation and Natural Resources.

5. ***Identifies in-kind contributions in the development and implementation of the project through volunteer labor.***
   Based on past attendance at previous volunteer seed collection and planting, we anticipate in-kind contributions of volunteer labor through community-wide restoration activities of $5,000 (based on the Department of the Interior's volunteer labor valuations of $21.36 per hour).

6. ***Promotes sustainability through the long term by emphasizing healthy and resilient landscapes by:***
   a. ***Conserving resources to ensure availability to future generations:*** The focus of this project is restoration of Sensitive species and their habitats. The scale of the mitigations will be completed at a holistic scale that incorporates areas within Project Areas where construction activities, relocation of infrastructure, and altered use patterns impact populations and habitats. By focusing at a more holistic scale, these mitigations allow for natural recovery to continue unassisted, providing a benefit beyond the 5-year funding. This project ensures the availability of resources for future generations through restoration of Sensitive species and their habitats, enhancement and protection, and increased visitor awareness and appreciation for the recovery and sensitivity of Sensitive species and their habitats.
   b. ***Restoring natural processes within project timelines:*** Completion of restoration at that habitat-scale will improve post-construction recovery of Sensitive species and their communities in the project areas. We will implement restoration actions that assist long-term recovery to recover lost and protect remaining Sensitive species and natural resources.

c. ***Will provide a benefit beyond the existence of SNPLMA:*** This project assists the long-term recovery of Sensitive species and their habitats. Upon completion of the project, we anticipate natural recovery will continue unassisted, providing a benefit beyond the 5-year funding. This project ensures the availability of resources for future generations through restoration of Sensitive species populations, habitats enhancement and protection, and increased visitor awareness and appreciation for the recovery and sensitivity of Sensitive species and their habitats.

d. ***Includes a stewardship component through education, outreach, and enforcement for public responsibility in maintaining the gains from the project:*** Through inclusion of education, outreach and volunteer opportunities, the project promotes long-term stewardship and a shared responsibility for its maintenance amongst the general public, specifically user groups accustomed to recreating in the project areas. Addressing recreation impacts will reduce long-term human impacts as the Sensitive species and their habitats recover.

e. ***Reduces long-term costs and minimizes the human impact on the environment.*** This project simultaneously provides for increased awareness of the sensitivity of natural and cultural resources in the general public and improved quality of natural and cultural resources through conservation of Sensitive species and their habitats. This project aims to accomplish this by reducing impacts to natural resources caused by the increased numbers and altered use patterns of people recreating in the Project Areas. Through inclusion of education, outreach and volunteer opportunities, the project promotes long-term stewardship and a shared responsibility for its maintenance amongst the general public, specifically user groups accustomed to recreating in the Project Areas, beyond the project's 5 years. Addressing recreation impacts will reduce long-term human impacts as the Sensitive species and their habitats recover.

7. ***Promotes connectivity by linking people to nature and recreational opportunities by uniting important places across the landscape.***

a. ***Encourages people to meaningfully connect with their natural environment and helps them appreciate and care for the environment:*** This project includes a primary deliverable to increase visitor awareness and appreciation for the recovery and sensitivity of Sensitive species and their habitats through educational programs and volunteer restoration projects. Through inclusion of education, outreach and volunteer opportunities, the project promotes long-term stewardship and a shared responsibility for its maintenance amongst the general public, specifically user groups accustomed to recreating in the Project Areas, beyond the project's 5 years.

Project Areas we currently identify for education programs and volunteer restoration projects include: Cathedral Rock Trail, Overlook, Restroom and Parking; Cathedral Rock Picnic Area; and Kyle Canyon Administrative and Visitor Complex. Depending on the long-term stewardship messages and opportunities available, we may hold events in other Project Areas as well. Appropriate activities for volunteers will include, but not be limited to: native and Sensitive species seed collections; outplantings of seeds or seedlings; unauthorized trail closures; and Science Safaris or Citizen Science Days.

b. ***Connects habitats, migratory corridors, or protected areas:*** Redesigns and relocations of infrastructure within existing developed site boundaries and development of new recreation facilities fragmented populations and habitats for several Sensitive species. New developments and redesigns of existing developments also increase numbers and alter use patterns of people recreating in the Project Areas, increasing potential for new use patterns to further fragment populations and habitats. Project mitigations developed during CIP planning minimized long-term impacts such as population and habitat fragmentation. Implementation of the biological mitigations will reduce habitat fragmentation and impacts to Sensitive species and natural resources.

   This project will promote long-term stewardship in the Las Vegas community at large by working with private and public partners, through which we would receive support for volunteer and staff labor. In return, we anticipate the public community would develop an increased awareness and appreciation for the recovery and sensitivity of Sensitive species and their habitats through educational programs and products. In the long-term, an increased sense of shared responsibility for maintenance amongst the general public will reduce long-term human impacts as the Sensitive species and their habitats recover.

8. ***Promotes community by improving the quality of life for the human community and protecting the integrity of biological communities by:***
   a. ***Conserving and restoring the functionality, resiliency, and integrity of biological communities:*** The focus of this project is restoration of Sensitive species populations and their habitats. Through implementation of biological mitigations, Sensitive species and their habitats are recovered in areas impacted by construction activities. We will implement restoration actions that assist in the long-term recovery and resiliency of the populations and their habitats.
   b. ***Encouraging partnerships and building a sense of community:*** In addition to promoting long-term stewardship, this project will only be successful with the support of private and public partners. Partnerships will be essential to the implementation of the project for support with volunteer and staff labor, supplies, and knowledge of available resources. This project will promote long-term stewardship in the Las Vegas community at large by working with private and public partners, through which we would receive support for volunteer and staff labor. In return, we anticipate the public community would develop an increased awareness and appreciation for the recovery and sensitivity of Sensitive species and their habitats through educational programs and products. Through these efforts, we anticipate connecting different groups through partnerships and building a sense of community around the shared interest of watershed restoration.

Schedule B						
CONSERVATION INITIATIVE						
ESTIMATED NECESSARY EXPENSES						
Project Name:	Endemic and Sensitive Species Biological Mitigations for SMNRA Capital Improvements					
Project #:		**Priority #:**		**Agencies:**	U.S. Forest Service	
Prepared by:	Jennifer Brickey					
Phone:	702-515-5402				**Initial**	x
Date:	4/7/2016				**Updated**	

1. Planning & Environmental Documentation		$ -	0%
(Surveys/ reports for cultural, natural, biological, archaeological resources, NEPA documentation, etc)			
2. FWS Consultation - Endangered Species Act		$ -	0%
(direct expenses for FWS if consultation is required)			
3. Direct Federal Labor to Implement Project (Payroll)		$ 159,100.00	22%
(Federal labor costs for completing the project)			
4. Project Equipment and/or Supplies/ Materials		$ 14,000.00	2%
(include specialized equipment, supplies and materials not included in contracts/ agreements)			
5. Travel & Per Diem for Implementation		$ 14,000.00	2%
6. Official Vehicle Use		$ 11,400.00	2%
(Based on agencies procedures for use, fuel, equipment, and mileage charges)			
7. Contracts/Grants/Agreements to complete the project		$ 367,000.00	50%
8. Required Training to Implement Project		$ 2,000.00	0%
(includes initial and annual training for LEOs and training necessary to implement the project)			
9. Other Necessary Expenses - See Expanded Budget		$ 166,700.00	23%
	TOTAL	$ 734,200.00	100%

COMMENTS

Endemic and Sensitive Species Biological Mitigations for SMNRA Capital Improvements

DETAILED COST ESTIMATE			
1. Planning and Environmental Assessment Costs			
	Subtotal	$	-
2. FWS Consultation - Endangered Species Act	**Subtotal**	$	-
3. Direct Labor/Payroll to Perform the Project (use fully loaded labor rate)			
Project Manager		$	66,000.00
Implementation Support Personnel (multiple)		$	79,200.00
Monitoring Personnel (multiple)		$	13,900.00
	Subtotal	$	159,100.00
4. Project Equipment			
Electronic equipment		$	5,000.00
	Subtotal	$	5,000.00
5. Project Materials and Supplies			
Field Supplies - Planting/Restoration Equipment		$	5,000.00
	Subtotal	$	5,000.00
6. Travel (airfare, car rental, per diem, etc)			
COR and project management training for the Project Manager		$	8,000.00
Specialist travel for implementation		$	6,000.00
	Subtotal	$	14,000.00
7. Official Vehicle Use			
Project Manager, specialsists		$	11,400.00
	Subtotal	$	11,400.00
8. Required Training for Project Implementation (list purpose)			
COR Refreshers (if required)		$	2,000.00
	Subtotal	$	2,000.00
9. Cost of Contracts and/or Agreements to Perform Project			
Bio planting surveys		$	48,000.00
Weeds		$	100,000.00
Bio monitoring		$	48,000.00
Volunteer/education		$	25,000.00
Cult monitoring		$	24,000.00
Soils supplies		$	25,000.00
Plant grow out		$	3,000.00
Plant materials - seed		$	30,000.00
Bio restoration		$	64,000.00

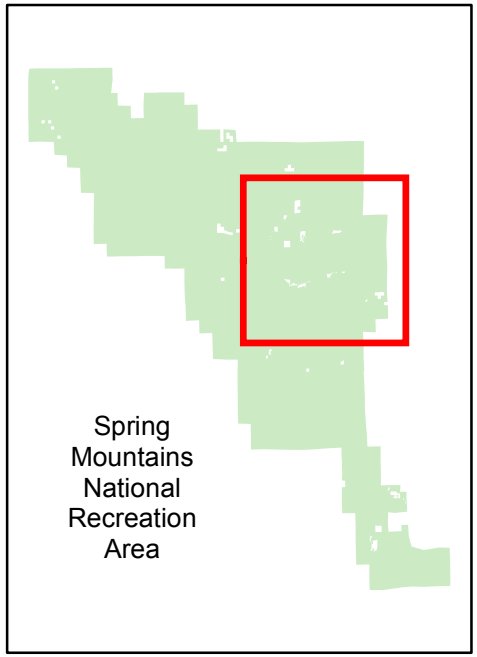
Detailed Cost Estimate Other Necessary Expense Worksheet

Detailed Cost Estimate Subtotal	$	367,000.00
OTHER NECESSARY EXPENSES (APPENDIX B-11)		
10. Examples of Other Necessary Expenses (providing a breakdown of these costs is optional, however a		
ADMINISTRATION COSTS		
Budget Tracking/Accounting and Execution	$	29,500.00
Allocation of Transferred Funds to the Region and to the Field*	$	4,000.00
Preparation of OMB Reports Required in Association with Transferred Funds*	$	-
Project Procurements and Contract Oversight (If any in addition to Direct Labor for the	$	-
Preparing Transfer Requests*	$	11,400.00
Transfer of Station cost (PCS) for Hiring Project Personnel	$	-
Managing Allocation of Transferred Funds*	$	4,000.00
Financial Audit Support	$	-
Supervision and Oversight of SNPLMA-Funded Staff and/or Contractors	$	38,000.00
Travel Administration for Required Project Travel	$	-
Human Resource/Relations Tasks for SNPLMA-funded Personnel	$	-
Preparing Quarterly Status Reports	$	3,800.00
Tracking Project Activities, Expenses, IGOs, Task Orders (e.g., project database	$	-
IT Services to Install Hardware/Wiring, Project-Required Software, and	$	-
A percent of Project-Related Indirect Costs for Support Based on Staff Time Spent on	$	80,000.00
PROJECT CONSTRUCTION, CONSULTATION AND MANAGEMENT		
Duties of Project Manager/Supervisor (If not already included on the Estimated	$	-
Construction Trailers and Utilities	$	-
Required Project Consultations (e.g., safety and fire; cultural and historic, ADA, etc.)	$	-
Public Scoping and/or Meetings for Environmental Review, Project Design, etc. (Does	$	-
Review of Contracted Surveys, Assessments, Designs/Drawings, Reports (If not already	$	-
Construction Site Security	$	-
Cell Phones, Cell Service, Radios for Project Personnel Primarily in the Field	$	-
Required Cultural, Wildlife, Biological, and other Similar Surveys (If not already	$	-
Interest Required to be Paid on Construction Contract Retention Amounts	$	-
TEMPORARY OFFICE SPACE		
Lease Costs for New Temporary Space	$	-
Design and Installation of Modifications to Meet Space Plan Needs	$	-
Set Up Fees for Utilities (Gas, Electricity, etc.)	$	-
Furniture and Fixtures	$	-
Required Modifications to Meet Codes	$	-
Computer Equipment (See section on equipment costs for limiting conditions)	$	-
Installation Costs for Computer Networks, Telephone Service	$	-
Other (describe)	$	-
Other Necessary Expenses Subtotal	$	170,700.00
GRAND TOTAL	**$**	**734,200.00**
CASH/ IN-KIND CONTRIBUTIONS		
Contributor 1	$	-
Contributor 2	$	-
Total	**$**	**-**

SMNRA CIP Biological Mitigations

Legend

- CIP Mitigation Areas
- CIP Project Areas
- State Higway
- US Forest Service
- Private



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Humboldt-Toiyabe National Forest
U.S. DEPARTMENT OF AGRICULTURE

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