Narrative Descriptions

A. Detailed Project Description

The Rush Creek Tributary area is currently being overused, in part, due to a lack of adequate water sources across the landscape. Cattle, sheep, wild horses and burros are conditioned to use familiar places that provide adequate resources. The Rush Creek Tributary area is a convenient, accessible and reliable water source and feeding place. In addition, the Nobles Trail traverses through the tributary for about four miles and parallels Smoke Creek Road, a main thoroughfare. Vehicle use on the trail and in the waterway is another source of cultural and riparian degradation that needs to be addressed. This segment is mainly used by four wheel drive enthusiasts and Off Highway Vehicle (OHV) recreationists in the spring, when water is present and in the fall as a connector road for hunters.

All these uses are contributing to the ecological degradation of the Rush Creek tributary area, however, conditions have not yet crossed the threshold of no return. In addition, there is a population of silverleaf milkvetch, *Astragalus argophyllus var. argophyllus* which occurs here. This is a BLM sensitive plant and is currently on the California Native Plant Society's (CNPS) 2.2 list. BLM records of 2002 indicate that this area supported a thriving population of more than 5000 silverleaf milkvetch (*A. argophyllus*) plants. A recent survey by the Bureau of Land Management (BLM) Eagle Lake Field Office (ELFO) staff revealed less than 100 plants present and degraded upland conditions overall.

The ELFO would like to permanently fence off the degraded Rush Creek Tributary portion of this project to vehicular traffic and temporarily fence it off to grazing. Eliminating vehicles from the tributary will protect botanical and cultural resources, eliminate pollution associated with oil and gas emissions and reduce soil compaction. Soil compaction can increase water infiltration, decrease runoff, and reduce severe erosion problems. Temporarily eliminating grazing allows the vegetation to rest and to recover naturally.

Dispersed water sources currently provide low water quality and quantities. In an effort to provide quality water for livestock, wildlife, wild horses and burros we would like to re-develop eight adjacent springs and completely develop one spring. This will allow the permittees to more adequately distribute the grazing pattern across the landscape, thus allowing vegetation to recover between grazing visits.

In addition, we would like to conserve two important riparian areas. Upper Line Springs is about 100 acres of public land, managed by the BLM. Five Springs is located on a 323 acre inholding, owned by the State of California and managed by the California Department of Fish and Game (CDFG). These systems contribute a substantial amount

of water to the watershed. These special places will not be developed, but will be fenced to protect them from the trampling effects of grazing. Fencing will protect the water sources, soils and vegetation and enhance the riparian meadows, improve water quality and provide a naturally sustainable ecosystem.

The overall goals are to:

- Improve ecological conditions and wildlife habitat in the Rush Creek Tributary area and adjacent landscape.
- Improve water quality and watershed conditions across Smoke Creek-Frontal Smoke Creek Desert and Deep Creek-Secret Creek watersheds.
- Increase water source availability by providing dispersed and sustainable water sources for cattle, sheep, wildlife and wild horses and burros.
- Protect and enhance a population of silverleaf milkvetch, a special status plant.
- Protect this segment of the Noble's Emigrant National Historic Trail to enhance historic and recreational values.

The objectives are to:

- Reduce bare soil to less than 20 percent throughout the Rush Creek Tributary area.
- Protect wagon track swales in this segment of the Noble's Trail/Rush Creek Tributary.
- Increase the Rush Creek Population of silverleaf milk vetch to at least half of the 2002 rates of 5000 individuals.
- Improve riparian wildlife habitat
- Permanently fence Five Springs and Upper Line Springs riparian areas to improve ecological processes and water quality and to create sustainable riparian meadows.

The goals of this project are reflective of Proposition 84. It seeks to protect water sources across two watersheds, a special status plant population and cultural resources. Fencing will allow natural processes to improve ecological conditions at two meadows and to enhance riparian areas at nine dispersed spring sites. This project has a direct focus on agricultural land by improving grazing conditions on a landscape level and in four compartments of the Twin Peaks grazing allotment.

The scope of this project will encompass approximately 500 acres dispersed across the landscape. The Rush Creek Tributary area will be fenced using a t-post four wire

design. Water gaps will be incorporated in the design to ensure cattle, sheep and wild horses and burros will have access to the two water sources available at this site. Pedestrian and equestrian accessible gates will be installed at the north and south ends of the Noble's Trail segment. This will allow access for those interested in participating in non-motorized recreational activities, such as hunting, wildlife viewing and historical re-enactments.

Eight dispersed springs have been identified for re-development and one for development. All are located within a ten mile radius of the Rush Creek tributary area and all are adjacent to established roadways. Phone Trough, Coyote Spring, Rush Canyon Spring, Jenkins Spring, Sheep Trail Spring 1, Jenkins Trough Springs, Lower Line Spring and Antelope Spring will be re-developed and Lone Willow Spring will be developed. Each site is unique and will have specific requirements. The general method is to install spring boxes, cradled aluminum troughs, inflow and outflow pipes and escape ladders; this allows small wildlife species to escape if they happen to fall into the trough.

A collection box, or spring box is constructed out of corrugated metal pipe, 24 inches in diameter and is inserted into the ground to the water bearing strata of the spring site. A backhoe is used to dig a trench from the collection box to the trough area. At the trough site, either gravel fill or concrete will be used to provide a foundation for the troughs. If concrete is mixed it will be hand mixed on site. A backhoe will be used to dig a trench line for the pipe. Once the concrete has set, an aluminum trough(s) will be installed on the concrete pad. The inflow and outflow piping will be installed and the trough will fill via gravity. Escape ramps will be included in every trough installed.

These spring sites provide a natural riparian area that will be fenced using a t-post four wire design. These places provide good habitat for birds, including sage-grouse, wildlife and invertebrates. This design will keep grazers out but will allow small animals and birds to access the area.

Spring Development	**Location**	**Treatment**
Antelope Spring	40°438611 -120°119148	Spring box, piping, gravel fill, escape ladders, fence riparian area
Coyote Spring	40°523274 -120°097564	Remove old concrete trough, spring box, piping, float valve, two troughs & escape ladders, gravel fill, fence riparian area
Jenkins Spring	40°437881 -120°106	Piping, escape ladders, float valve, fence riparian area
Jenkins Troughs	40°524631 -119°985287	Spring box, piping, float valve, two troughs, escape ladders, fence riparian area
Lone Willow	40°474778	Spring box, piping, float valve, trough & escape

Spring	-120°098336	ladder, fence riparian area
Lower Line Spring	40°567105 -120°003063	Spring box, piping, float valve, two troughs with escape ladders
Phone Trough	40°3217733 -120°159942	Remove old concrete trough, install piping, trough with escape ladders, float valve, gravel fill
Rush Canyon Spring	40°328.030 -120°345.036	Two troughs with escape ladders and fence riparian area
Sheep Trail Spring 1	40°2911.429 -120°212.030	Piping, float valve, trough & escape ladder, fence riparian area
Fencing	**Location**	**Treatment**
Five Springs	40°536655 -120°134203	Two miles of steel pipe fencing
Rush Creek Tributary	40°3224589 -120°21.844	Four miles of four wire design fencing
Upper Line Spring	40°56786 -120.004498	Two miles of four wire design fencing

All rangeland work in WSA's will adhere to BLM Wilderness Management Guidelines. To enhance restoration success weed treatments will occur in all areas. Monitoring special status plants, weeds and fencing and development will all be a part of this project and will be discussed in detail in the Long Term Management Plan.

Project Summary

The ELFO will temporarily enclose the segment of the Noble's Trail which is also the Rush Creek Tributary area to vehicular traffic. This area is about 225 acres. A walk through gate will be provided for pedestrian and equestrian access. The Rush Creek Tributary enclosure will protect populations of silverleaf milkvetch that are currently being overgrazed. To encourage dispersed grazing, nine adjacent springs located within a ten mile radius of the Rush Creek Tributary area will be developed. Each site consists of approximately one acre each. This will create sustainable water sources across the landscape that will provide adequate amounts of quality water for cattle, sheep, wildlife and wild horses and burros. The permittees will then be able to drive livestock to these improved places thus allowing for dispersed grazing. The second aspect of this project seeks to create riparian meadows and will permanently fence Upper Line Springs which is about 100 acres. This project will also permanently fence 65 acres of Five Springs, which is California state land, managed by the California Department of Fish and Game (CDFG).

Environmental Setting

The Bureau of Land Management, Eagle Lake Field Office manages just over one million acres with most land located in Lassen County, California and Washoe County,

Nevada. Livestock grazing is permitted on 980,000 acres, in 54 allotments with 49 permittees. This region is composed mainly of remote sagebrush rangeland where summers are hot and dry and winters are generally cold. Precipitation levels in this region range between 8-12 inches, most is in the form of snowfall and the amounts can vary from year to year.

The topography is comprised of scattered mountain peaks connected by flat bottomed valleys with elevations ranging between 4500-7500 feet. Soils are generally rocky, formed from colluvium and derived from volcanic parent material. The vegetation is dominated by sagebrush, rabbit brush and bitterbrush with and understory consisting of perennial grasses and herbaceous forbs. Juniper trees are scattered in patchy stands and small riparian areas dot this arid landscape.

B. Work Plan and Schedule

All work can be scheduled to begin after 60 days of SNC authorization and as soon as conditions permit i.e. snowfall and road conditions must allow for access. This is generally sometime after May 15.

When soils have stabilized after the spring thaw, development and re-development work can begin at the dispersed water source sites. It is anticipated that the easiest access sites will be the first sites to receive treatment. Contracted fencing activities will begin in June of 2013 and will be completed in the first year.

Weed inventories will be conducted at all sites, including Five Springs. At the time of inventory any noxious weeds found will be documented and treated. Special status plant surveys will be conducted, if new populations are found they will be documented and added to the monitoring map and included in the annual survey schedule.

Project Sites	Detailed Deliverables	Timeline
Weed inventories and Treatments	All sites will be inventoried for weed infestations and treated, BLM staff	June 11-14, 2013 Repeated annually and indefinitely at BLM expense
Special Status Plant Surveys	Inventory and monitor SSP populations in project area. BLM Staff	June 10-14, 2012 Repeated annually and indefinitely at BLM expense
R C Tributary/Noble's Trail	Install wire fencing-Contracted	June 10-14, 2013
Phone Trough	Re-development BLM staff	June 10-13,2013
Upper Line Spring	Install wire fencing-Contracted	June 17-21, 2013
Five Springs	Install pipe fencing- Prison Crews-CDFG supervision and in kind contribution.	July 8-12, 2013 July 15-19, 2013

Rush Canyon Spring	Re-development BLM Staff Install wire fencing- BLM Staff	August 12-13, 2013 August 19-21, 2013
Coyote Spring	Re-development BLM Staff Install wire fencing- BLM Staff	September 9-12, 2013 September 16-18, 2013
Antelope Spring	Re-development BLM Staff	July 7-8, 2014
Jenkins Spring	Redevelopment BLM Staff Install wire fencing- BLM Staff	July 28-31, 2014 August 4-6, 2014
Lone Willow Spring	Development BLM Staff Install wire fencing-BLM Staff	August 18-21, 2014 August 25-27, 2014
Sheep Trail 1 Spring	Redevelopment BLM Staff	June 22-25, 2015
Lower Line Spring	Redevelopment BLM Staff	August 10-13, 2015
Jenkins Trough Spring	Redevelopment BLM Staff Install wire fencing-BLM Staff	September 14-18, 2015 October 1-4, 2015
Range improvement inspections	This will occur annually. Necessary maintenance will occur.	Repeated annually at BLM expense.

C. Restrictions, Technical/Environmental Documents and Agreements

These sites are located in Wilderness Study Areas (WSA). This project will operate under BLM guidelines, 6330-Management of Wilderness Study Areas. This guidance outlines how rangeland improvements, maintenance and management can be carried out in WSA. Actions that seek to protect cultural resources are also included in this guidance. All aspects of this project and best practices for retaining wilderness characteristics have been evaluated by the ELFO staff and applied to the design of this project. The applicable portion of this guidance is included in the Regulatory Requirements section of this document.

Permits are not applicable because all the work will be done on BLM and California state land. There will be no streambed ground disturbance which eliminates the need for a Section 404 permit. The California Department of Fish and Game has stated that they do not require any permits to construct fencing because the fencing is wildlife friendly.

Antelope Spring is part of a small 40 acre inholding, owned by Mr. John Espil. The overflow is on BLM land and a Rangeland Agreement is in place between Mr. Espil and the BLM. The ELFO and Mr. Espil have a long history of cooperating and working together to improve rangeland conditions. Mr. Espil, other permittees, hunting and

environmental groups were contacted about this project during the NEPA scoping period. There were no opposing comments received in fact, the comments received were positive and supportive.

Five Springs is located on California State Land and managed by the California Department of Fish and Game. There is a Memorandum of Understanding (MOU) in place between the BLM and the CDFG that allows collaborative projects to occur. This document is on file at the Eagle Lake BLM Office. It is called the Master Memorandum of Understanding between the California Department of Fish and Game and the Bureau of Land Management Department of the Interior # 6521.11 CA-932.2 WPC 0119R WPC 0106R.

D. Organizational Capacity

The BLM is a land management agency operating under the Department of the Interior. Nationally, the BLM manages livestock grazing, mining, energy development and wild horses and burros on BLM designated lands. There are several federal laws that guide the BLM such as the Federal Land Policy Management Act, the Free Roaming Wild Horse and Burro Act, the 1872 Mining Act, and the National Environmental Policy Act.

This project will require a compilation of contracted work, in house labor and prison labor. Funding for contracted labor is requested in this project proposal. The contracted fencing labor will be provided through the General Services Administration (GSA). Under GSA guidelines the ELFO will place a bid for the labor. At this stage it is unknown who the contractor will be, under this program only qualified businesses are allowed to bid, we must assume that they will have expertise in this area. The labor to install the Five Springs pipe fencing will be provided by prison labor, overseen and paid for by the California Department of Fish and Game, Wendell, CA. Office.

All spring development, re-development and spring site fencing will be conducted by the BLM, ELFO staff. The spring development and re-development is very specialized work. Our staff has the experience and expertise to complete this work correctly and more efficiently than contracted labor. Labor to fence the spring box areas will also be completed by ELFO staff. Scheduling the development and re-development of the springs is estimated at three springs per year over a three year period. The ELFO will provide the labor necessary to fence these areas after the development work at the sites are completed and equipment has been removed.

E. Cooperation and Community Support

The Honey Lake Valley Resource Conservation District (RCD) has expressed a positive interest in this project. Tim Keesey, RCD Watershed Coordinator will take part in

flagging the sites for fencing. The California Department of Fish and Game and the Nevada Department of Wildlife have both expressed support for this project.

F. Long-term Management and Sustainability

This project will improve long term flexibility in rangeland grazing management. It will enhance sustained wildlife habitat through all life stages and across multiple population cycles. Long term benefits to water quality are expected, specifically sediment reduction within the project areas and downstream. Aquatic ecosystems will be allowed to slowly recover naturally and to approach pre-disturbance conditions.

Temporary fencing and maintenance free pipe fencing will enhance natural recovery and cultural resource protection. This will allow for sustainable land management practices. The troughs to be used are long lasting aluminum troughs. These have been shown to last more than thirty years. Installing aluminum troughs and fencing riparian areas to exclude grazers will reduce maintenance costs and provide sustainable clean accessible water sources across the landscape.

The long term management of this project will include special status plant surveys, weed monitoring and treatments and annual range improvement inspections. The ELFO currently has active and effective special status plant, weed monitoring and range improvement inspection programs in place. These programs require annual surveys and the project sites that are not currently a part of these surveys will be added to existing monitoring schedules. This is something the BLM does on an annual basis therefore; labor costs for monitoring special status plants, weed treatment and facility maintenance have not been requested under this project proposal. The Long Term Management Plan discusses these programs in further detail.

G. Performance Measures

This project aligns with four Sierra Nevada Conservancy Performance Measures:

- Acres of land improved or restored
- Linear feet of stream bank protected or restored
- Number of significant sites protected or preserved
- Feet of trail/path constructed or improved

<u>Acres of Land Improved or Restored</u>

The project area includes approximately 500 acres. The purposes of the land improvement and restoration are natural resource protection, water quality improvement, wildlife habitat enhancement, resource management, and recreation. Natural resources protection will include the at-risk population of *Astragalus argophyllus*

var. argophyllus, weed treatments, and reduced soil erosion. With reduced soil erosion, sediment loading in the waterways will be reduced, thereby improving water quality and aquatic habitat. The lands included in the project area are important for a diverse array of wildlife, and this project seeks to enhance wildlife habitat. This project will assist in resource management, specifically grazing management, with improved distribution of livestock and water sources. Recreation will be improved by ending the degradation of the Nobles Emigrant National Historical Trail. All areas within this project are identified as highly important ecological sites; therefore, the land improvement and restoration efforts are of high priority.

Location	Acres of Land Improved or Restored
Antelope Spring	13.6 acres
Coyote Spring	9.6 acres
Jenkins Spring	4.7 acres
Jenkins Troughs	12.2 acres
Lone Willow Spring	1.9 acres
Lower Line Spring	60
Phone Trough	2.0
Rush Canyon Spring	2.6 acres
Sheep Trail Spring 1	0.3 acres
Five Springs	64.0 acres
Rush Creek Tributary	217.2 acres
Upper Line Spring	99.7 acres

Linear Feet of Stream Bank Protected or Restored

Location	Linear feet of stream bank protected
Antelope Spring	N/A – wetland with no defined channel
Coyote Spring	2,586 feet
Jenkins Spring	N/A – wetland with no defined channel
Jenkins Troughs	5,164 feet
Lone Willow Spring	N/A – wetland with no defined channel
Lower Line Spring	N/A – fence existing
Phone Trough	N/A – fence existing
Rush Canyon Spring	1,096 feet
Sheep Trail Spring 1	N/A – wetland with no defined channel
Five Springs	18,604 feet
Rush Creek Tributary	25,528 feet
Upper Line Spring	10,490 feet

Number of Significant Sites Protected

The Rush Creek area is a place that provided adequate water, food sources and animal

habitat. There are several documented pre-historic and historic sites found across this landscape. This project will protect a two mile segment of the Nobles Trail, a historic emigrant trail. Eleven known lithic scatters and three milling sites will be enhanced by this project. Two habitation sites, one with evidence of pre-historic and historic uses will be protected. This project will also protect a petroglyph site.

Feet of Trail/Path Constructed or Improved

The Nobles Emigrant National Historic Trail is a federally-designated historical and cultural site. The trail traverses through the Rush Creek tributary portion of the project, where the condition and values of the trail are currently at risk. The Nobles Emigrant National Historic Trail is open to the public as a multi-use trail. Restoration and protection of this area will ensure the continued enjoyment of the trail by the public while eliminating vehicular traffic that is causing degradation of both the trail and the riparian ecosystem. In total, 8,769 feet of trail and adjacent landscape will be restored and protected.

H. Budget Narrative

The BLM and the CDFG will provide in-kind support in the form of fence installation, monitoring, weed treatment and maintenance labor and costs. CDFG is able to provide the labor to build, monitor and maintain the pipe fencing around Five Springs. In addition, the BLM will contribute to this project by monitoring for special status plants and weeds and applying any treatments required. The BLM will also take responsibility for the maintenance of all improved facilities on federal land, this includes developments and wire fencing, and the removal of temporary fencing around the Rush Creek Tributary area. This totals to $14,540.00 over a four year period.

The California Department of Fish and Game is able to contribute the costs of hiring prison labor to install steel pipe fencing around Five Springs. This is maintenance free fencing that is commonly used by land and wildlife agencies. The total cost for installation and maintenance under this project is a one-time cost of $800.00 the first year. If any maintenance costs arise due to vandalism or acts of nature the CDFG will be responsible for all maintenance costs.

Providing adequate water sources across the landscape will improve livestock grazing conditions which will benefit the ranching industry region wide. This project will also improve ecological conditions that will enhance wildlife populations and improve the health and vitality of wild horse and burro populations. This can allow for increased recreational opportunities to the area in the form of wildlife viewing, hunting, hiking and camping. It is anticipated that increased recreation will increase economic revenue to the region.