

**STATE OF CALIFORNIA
SIERRA NEVADA CONSERVANCY**

**Sierra Nevada Conservancy Grant Program Safe Drinking Water,
Water Quality and Supply, Flood Control, River and Coastal Protection Act of
2006 (Proposition 84)**

Applicant: MOHAWK VALLEY STEWARDSHIP COUNCIL

Project Title: WHITE SULPHUR SPRINGS RANCH HYDROLOGIC AND
SPRING PROTECTION PLAN

Subregion: NORTH CENTRAL

County: PLUMAS

SNC Funding: \$75,000.00

Total Project Cost: \$75,000.00

Application Number: 371

Final Score: 92.4

PROJECT SCOPE

The project will develop a spring protection plan that identifies and maps all of the spring sites on the property on White Sulphur Springs Ranch. The plan will assess the quality and quantity of the water for each feature, determine the ecosystem function and establish Best Management Practices to be applied so that the springs will be protected and recreational use will be resumed. Proposition 84 goals will be met by the protection of water sources and the implementation of best management practices to ensure sustained water quality.

PROJECT SCHEDULE

DETAILED PROJECT DELIVERABLES	TIMELINE
Grant Administration	March 2011- January 2012
Hydrologic Assessment	August 31, 2011
Progress Report	September 30, 2011
Spring Protection Plan	December 31, 2011
Final Report (Completion)	December 31, 2011
FINAL PAYMENT/FINAL PAYMENT REQUEST	January 31, 2012

PROJECT COSTS

PROJECT BUDGET CATEGORIES	TOTAL SNC FUNDING
Hydrologic Assessment	\$34,000.00
Spring Protection Plan	30,000.00
Grant Administration	7,000.00
Progress and Final Reports, Performance Measures	4,000.00
GRAND TOTAL	\$75,000.00

PROJECT SUPPORT LETTERS

- Mohawk Meadows Owners Association
- Valley Ranch Homeowners Association
- Rotary Club of Portola
- Plumas County Board of Supervisors
- Plumas County Museum Association, Inc.
- Plumas Corporation
- Whitehawk Ranch Homeowners Association

PROJECT PERFORMANCE MEASURES

There are four Performance Measures common to all grants. In addition, grantees are required to include between one and three project-specific measures. Performance Measures listed here represent those proposed by applicants and may be modified through further discussion with SNC staff.

- Number of Collaboratively Developed Plans and Assessments
- Percent of Pre-project and Planning Efforts Resulting in Project Implementation

PROJECT SUMMARY

SNC Reference Number (enter if previously assigned)
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County: Plumas

Applicant: Mohawk Valley Stewardship Council

Project Title: White Sulphur Springs Ranch Hydrologic and Spring Protection Plan

PROJECT GOAL

To develop a spring protection plan that will identify and map all springs and water features on WSSR, assess the quality and quantity of water of each feature, determine ecosystem functions, and develop best management practices to protect springs so that recreational use can occur while protecting water features at WSSR.

PROJECT SCOPE

The White Sulphur Springs Ranch has numerous seeps and springs, small tributaries, wetlands and riparian zones that provide unique habitats for aquatic and riparian dependent species, as well as serving as headwater sources to a major Sierra Nevada meadow system (Mohawk Valley), Sulphur Creek and downstream. Deeper geologic features such as seeps and springs, which are charged through a greater than annual recharge regime, are important components of hydrologic processes in small (and large) watersheds and may become even more critical under climate change. Springs originating at WSSR help support local summer baseflows and thus influence aquatic habitat quality and quantity on site and downstream as well as species diversity. Springs at WSSR provide multiple natural, recreational, and economic benefits for recreational users and the local community as they provide water for a warm-springs swimming pool, fire safety, living laboratories for environmental education, aesthetic benefits to outdoor users and special habitat for aquatic and riparian dependent species. Preliminary assessments estimate that there are more than 23 springs on and within the vicinity of WSSR, representing a large concentration of freshwater springs in the Sulphur Creek watershed. The quantity and quality of water discharging from WSSR's springs, however, must be protected as the property is restored for public use since the quality of spring water will affect recreation quality and ecological conditions. In addition to site protection at springs and seeps, the quality of water entering the ground and springs is influenced by human activities on the land within a watershed and ground water recharge basin or springshed for each spring. Of particular concern statewide are increased pollutants in groundwater from wastewater, fertilizers, and stormwater runoff.

Recognizing the impending restoration of WSSR for public use, the MVSC is proposing to identify springs and all other water features on the property, and develop a spring protection and restoration plan that will protect water sources while allowing and managing for their responsible use for the public benefit. For example, a large spring-fed pond at WSSR serves as a water source for fire safety on the property and this pond will also be used for bird watching, environmental education and angling (existing populations of fish). This pond will be restored for fire safety (it is currently filled in) as well as for public use and wildlife habitat. Several warm springs on the property provide water for the swimming pool. Upgrades to plumbing from these springs may be needed to meet State pool turn-over rates and water quality standards. In addition, the public desires that the swimming pool be open year-round, which would require tapping into a hotter spring on the property during winter months. The MVSC is restoring trails on existing dirt roads and railroad grades, as well as installing ethnobotanical gardens and an amphitheater to maximize environmental education opportunities and cultural events for our community. Currently, several springs are diverted by man-made or eroded ditches into structures on the property and these springs must be restored to their natural drainages to restore habitat functions and to protect infrastructure on the property. Thus, there is a need for an assessment of each spring and water feature on the property including an assessment of the quality and quantity of water and associated ecosystem function of each spring: the hydrologic role and connectivity of each spring relative to maintenance of wetlands, riparian and drainage features will be determined.

The resulting deliverable will be a spring protection plan, which will identify locations, water quality, water quantity, hydrologic connectivity to special habitats and management strategies for all levels of spring protection. The plan will develop best management practices to help protect water resources as recreation opportunities are provided at WSSR. Further, to ensure the continued health of springs and

other water features on WSSR, a holistic approach to springshed (the land areas that provide their water) management will be identified including identifying the activities within the springsheds that may adversely impact the quantity and quality of ground water, in turn impacting the health of springs (both the water flow and quality) and related ecosystems. The plan will minimize recreation impacts through appropriate site design, sensitive landscaping, management strategies and effective erosion and sediment controls. The plan will establish specific planning and best management practices for planned uses such as biking and hiking trails, amphitheater events, parking, pool use and maintenance, and community events. The plan will also develop an ongoing management structure to implement and monitor the springshed protection program that is identified in the plan.

LETTERS OF SUPPORT

SEE ATTACHED

SNC PROJECT DELIVERABLES AND SCHEDULE

DETAILED PROJECT DELIVERABLES	TIMELINE
Grant Administration	May 2011-January 2012
Hydrologic Assessment	June 2011-August 2011
Spring Protection Plan	December 2011
Progress and Final Reports, PMs	May 2011-December 2011

SNC PROJECT COSTS

PROJECT BUDGET CATEGORIES	TOTAL SNC FUNDING
Hydrologic Assessment	\$34,000
Spring Protection Plan	\$30,000
Grant Administration	\$7,000
Progress and Final Reports, PMs	\$4,000
SNC GRANT TOTAL	\$75,000