

Sierra Nevada Conservancy

Proposition 84 Preservation of Ranches and Agricultural Lands Grant Program
Category II Grant Application

Shasta Land Trust

"Hathaway Ranch Riparian Zone Restoration Planning"

October 2012

Narrative Description

A. Detailed Project Description Narrative

1. Project Summary

Shasta Land Trust (SLT) requests a Sierra Nevada Conservancy (SNC) grant of \$39,600 to accomplish pre-project planning activities necessary to implement important restoration projects on the Hathaway Ranch, which is protected by an SLT conservation easement. This grant will allow SLT to create specific project designs for future restoration work in the riparian areas of Oak Run Creek, develop project designs for installing riparian area exclusion fencing with associated off-stream livestock watering facilities, develop a management plan to manage grazing to the benefit of native species composition and improved livestock forage, complete baseline reports for the site, and acquire all applicable permits for these projects.

The Hathaway Ranch is a 6,600 acre cattle ranch in central Shasta County. SLT acquired a conservation easement that permanently protects the Hathaway Ranch in 2006. The section of Oak Run Creek that will be studied in this grant includes areas that are losing several acres of valuable ranchland every year due to mass wasting in large erosion events and stretches overgrown with Himalayan blackberry. The pastures in this area of the ranch do not include any off-stream water sources, and there is very little functional riparian exclusion fencing. By developing plans for projects that will restore natural hydrologic functions and habitat and plans to improve grazing use of the area to the benefit of ranching operations and facilitating, this grant from the SNC will provide lasting benefits to the unique habitat, working landscapes, and water quality of the Hathaway Ranch.

These plans will be developed by SLT with technical assistance provided by agency partners such as the Natural Resources Conservation Service (NRCS), the Western Shasta Resources Conservation District (WSRCD), the Department of Fish and Game, and the US Fish and Wildlife Service. Students in the GIS and Botany Programs at

Shasta College will provide mapping and species identification for the baseline reports and plans. The landowner of the Hathaway Ranch will also provide in-kind support during the development of the plans and baseline reports.

2. Goals

This grant will fund creation of at least four site-specific restoration plans, a baseline report, and a management plan. The completion of these important plans will enable SLT to initiate targeted and beneficial restoration and enhancement projects that will measurably improve the habitat, agricultural viability, and water quality of Oak Run Creek on the Hathaway Ranch.

First, SLT will work with students from Shasta College to complete a thorough baseline report of the study area. Students from the Shasta College Botany Department visited the site in spring 2012 to begin to catalogue plant species, and will complete similar research on visits in the fall of 2012. During the spring semester of 2013, students in that program will conduct more exhaustive study of the site, and coordinate closely with students in the GIS Program so that species locations can be mapped and included in the baseline report. Students in the GIS Program will also work with hired contractors to help produce the maps used in the restoration and management plans.

The completed baseline report will then be used to inform the creation of site-specific restoration plans. At least three such plans will be developed to improve streambank integrity, through armoring or other means, to mitigate loss of important rangeland during flood events. SLT will also use this grant to create plans to remove invasive species, particularly focusing on the large thickets of Himalayan blackberry at the site. Any invasive species removal plans will be adaptable to utilize volunteer contributions or paid contractors.

Finally, this grant will also fund the creation of a specific project design to install riparian fencing and an off-stream livestock water facility for pastures adjacent to Oak Run Creek. Currently, only one short stretch of the creek includes exclusion fencing from the riparian area, but the lack of an off-stream watering facility precludes ever excluding livestock from sensitive riparian resources. The plan for fencing and watering facilities will be developed in coordination with a revised management plan for the site to improve riparian habitat and forage composition in the pastures.

The plans created with these grant funds will facilitate future projects that will restore over 40 acres of important riparian habitat, approximately 1.5 linear miles of in-stream habitat, and over 200 acres of pasture on the largest SLT conservation easement property. The planned restoration projects will eradicate massive stands of Himalayan Blackberry along the banks of Oak Run Creek, armor eroding banks to reduce the loss

of prime grazing land to rapid erosion, address flow rates that cause erosion downstream, restore more natural stream flow and flooding frequency, and begin to reduce the amount of star thistle in the adjacent pastures. Installation of alternative stock watering improvements and additional riparian fences will improve the pastures' usefulness in the ranching operations of Hathaway Ranch, and serve to protect the riparian habitat by limiting livestock access to its fragile banks. These improvements and restoration will measurably improve the grazing value of the pastures at the site and prevent their further destruction due to erosion.

The final plans for the restoration projects will include alternate scenarios for work that can be accomplished through volunteer labor and donated equipment, as well as plans for work that would require contracted labor (such as the California Conservation Corps). In this way, these plans will provide opportunities for immediate and beneficial restoration activities, regardless of the availability of future grant funds for future projects. This flexibility and identification of volunteer-led projects will also increase the utility and applicability of these plans for future restoration projects at other sites on SLT-conserved properties.

3. Scope

These grant funds from SNC will be used to complete planning and permitting for future work, but this specific grant will not be used to implement any restoration or enhancement projects. These plans and permits will enable future restoration projects, and which may be funded by future grant requests to other agencies or foundations. The long-term partnership of SLT and the landowners, as reflected in the perpetual conservation easement for the Hathaway Ranch, means that these plans will be useful whenever such future projects receive adequate funding.

Conservation easements held by SLT protect over 20,000 acres in Shasta County, and each SLT conservation easement grants SLT the right to conduct restoration projects on riparian areas within those conserved properties. The specific plans developed with this grant will suggest improvements which could be implemented on many of these other riparian areas on conserved properties. Thus, the plans produced by this grant will likely provide benefits to many other important conserved lands in Shasta County, amplifying the impact of this important planning grant.

4. Public Benefits

Oak Run Creek provides drinking water, recreation, and irrigation water to many residents in this part of the county, and this grant will create plans that will lead to improving its water quality and hydrologic functions. The Hathaway Ranch is upstream of the majority of the public uses of Oak Run Creek, and the restoration plans funded by this grant promise to enhance the stream system and deliver higher quality water to those downstream users.

Waters from Oak Run Creek drain into Cow Creek, which is the northern-most undammed tributary of the Sacramento River (downstream of Shasta Dam). Thus, by improving the water quality in Oak Run Creek, the future projects that follow these grant-funded plans will also improve water quality that will benefit the water supply system that serves much of California.

The plans funded by this grant will involve several strategic partnerships which will facilitate dialogue and greater understanding between organizations involved in conservation in Shasta County. This grant will also provide important real-world job training to students enrolled in Shasta College. By utilizing students from Shasta College in different phases of this planning project, these students will gain exposure to important aspects of environmental work, and make contacts with local professionals from the field they are studying. These benefits will contribute to a better educated local workforce, more integrated local organizations, and the contract work funded in this grant will be used to support local businesses.

The restoration work which will follow the plans funded under this grant will also improve the habitat for anadromous fish and other native plant and animal species in the Cow Creek watershed. These habitat improvements will serve to enhance the ecology of the larger watershed, supporting the natural character of the landscape that is prized by residents and visitors to the area. Improvements that benefit the grazing operations on the property will help support a local agricultural producer, and indirectly benefit the local agricultural economy.

5. Environmental Setting

The Hathaway Ranch is located in the foothills of central Shasta County, near the community of Oak Run. The property includes portions of Oak Run Creek, Swede Creek, and French Creek. Blue oak woodlands are the dominant habitat type found on the property. Hathaway Ranch provides 'winter pasture' to cattle raised by *Hat Creek Grown*, a locally based grass-fed beef company. Cattle are put onto Hathaway Ranch

in the fall and removed in the spring, however some of the pastures around Oak Run Creek are grazed periodically year-round.

Cattle ranching is the most common land use on properties close to the Hathaway Ranch, but rural residential development is increasing in the area. This project will improve the riparian habitat, water quality, and agricultural productive capacity of the Hathaway Ranch, ensuring that this protected property continue to provide important public benefits.

Oak Run Creek is an important tributary in the Cow Creek Watershed, and the Hathaway Ranch is one of the largest privately-owned ranches in the watershed. The waters of the entire Cow Creek watershed provide habitat to a number of sensitive species, including special status species such as the fall and late fall Chinook salmon and the Central Valley Steelhead species. The blue oak woodlands of the property also constitute an increasingly threatened habitat type in California. The oak woodlands of the Hathaway Ranch are contiguous with those found on the 5,000 acre Rickert Brothers Ranch to the west, protected by an SLT conservation easement. In total, SLT holds conservation easements on over 18,000 acres of privately owned ranches in the Cow Creek Watershed, which has been a major focus area for SLT for over 10 years.

Restoration of the riparian resources on the Hathaway Ranch fits directly into several conservation plans and strategies including the Resource Protection Strategies and Agricultural and Open Space Elements of the Shasta County General Plan, the Bureau of Reclamation's *Anadromous Fish Restoration Plan* and Habitat Restoration Program, the California Resources Agency's *Restorign Cnetral Valley Streams: A Plan for Actions*, and the CALFED Bay-Delta Ecosystem Restoration Program. This project will also complement the DFG Cow Creek Conceptual Area Protection Plan and the *Cow Creek Watershed Assessment* produced by the Western Shasta Resource Conservation District.

B. Workplan and Schedule Narrative

Working with skilled volunteers from SLT's Lands Committee and Stewardship Team and a local consulting firm, the project site will first be studied to determine detailed baseline conditions. Students from the Shasta College GIS Program will assist in creating detailed baseline maps of the site, and students in the Botany Program at Shasta College will identify plant species found at the Site. The maps and assessment will be completed by July 2013.

Permitting and CEQA requirements will be researched in 2013, in coordination with SNC and the local consulting firm. Any required permits will be obtained and CEQA compliance will be achieved by July 2014.

Detailed project planning will be carried out in 2013. A final plan, including a schedule of proposed activities and a set management recommendations for improving grazing at the Site, will be developed by March 2014. With the final plans and permitting in place, the riparian area restoration projects and installation of alternative water facilities will be expected to begin by early 2015, led by SLT and involving many volunteers and partners.

C. Organizational Capacity Narrative

SLT is a private nonprofit organization dedicated to conserving the beauty, character and diversity of significant lands in far northern California. SLT holds seven conservation easements which permanently protect over 20,000 acres of Shasta County. The most recent conservation easement for SLT was acquired in October of 2010 and protects the 5,000 acre Rickert Brothers Ranch near Bella Vista.

In February of 2011, SLT earned accreditation from the Land Trust Accreditation Commission (one of the first 8% of land trusts nationwide to earn this distinction). By earning accreditation, SLT demonstrated the high standards SLT brings to land transactions, financial management, and organizational integrity.

SLT is governed by an all-volunteer Board of Directors, with additional community members serving on various committees such as the SLT Lands Committee, which reviews all conservation or restoration projects contemplated by SLT. The Lands Committee and SLT Board of Directors have reviewed and approved this project and this grant application. Several members of the SLT Board of Directors have funded or worked on many restoration projects, including the former state director of the Department of Fish and Game, the former assistant executive director of the Wildlife Conservation Board, former staff from the US Forest Service, and staff from The Nature Conservancy. The Lands Committee includes two environmental engineers from CH2M Hill, a private consultant specializing in permitting and environmental compliance, and a former staff member of DFG who specialized in permitting, all of whom will contribute expertise and input during the development of these plans. Finally, the Executive Director of SLT holds a MS in Environmental Science and the SLT AmeriCorps member holds a MS in hydrology.

SLT is currently working with a coalition of organizations to establish a public trail on the McCloud River Railroad between Burney to McCloud. In March of 2012, SLT and the railroad signed a Purchase and Sale Agreement, formally establishing 2014 as the deadline to complete this important acquisition with myriad public benefits.

Conservation easements continue to be a focus for SLT as a cost effective way to conserve important habitat, water quality, agricultural land, and open space, and we expect to complete two conservation easement acquisitions in the next twelve months. Our environmental education program presents lessons about our oak woodlands to youth and adults in our community, our annual *Wildways* series offers over 20 events packed with local flavor and culture, and our robust volunteer program receives important contributions from over 100 volunteers each year.

D. Cooperation and Community Support

The project planning and design funded through this grant, and the subsequent restoration activities on Hathaway Ranch, are supported by a broad range of local organizations and individuals. SLT worked very closely with the landowners of the Hathaway Ranch to develop this grant application and conceptualize this planning project. The landowner support restoration along this stretch of Oak Run Creek, and as lifelong residents of the property, they offered invaluable insight into how the landscape is changing and what are the most pressing needs for restoration.

SLT also consulted with several agencies that have more experience in designing and carrying out restoration projects on private land, such as the Natural Resources Conservation Service and the Western Shasta Resource Conservation District (a letter of support from each of these organizations is included in this application). Their input helped scope this proposal and the nature of the expected planning, and the direct input and involvement of these groups will continue to be sought throughout all stages of these restoration efforts.

SLT will work with the landowners, Shasta College, volunteers, and consultants to develop the baseline studies and plans of this Planning Project. Students from the botany program at Shasta College have already visited the site to begin building a list of the various plant species present at the site, and those research visits will continue through 2012 and into 2013. Students from the GIS program at Shasta College have produced many maps for SLT over the years, and several students will again partner with SLT to provide maps for the baseline reports and restoration plans.

Finally, the site that will be studied and restored has been the location of many SLT events over the years. Most recently, this site has been the location for SLT's annual "Family Day at Hathaway Ranch," held each spring. Family Day is a free event for children and families that features lessons presented by SLT volunteers, the Whiskeytown Environmental School, the 4-H GPS group, and 'Local Indians For Education.' The families, students, and volunteers that attend future Family Days at the Hathaway Ranch will enjoy the more sustainable and natural habitat at the site that results from the restoration activities planned under this grant.

Partnerships with Shasta College, other environmental non-profits, state and federal agencies, and local experts will be cultivated and utilized to create plans to restore the Site that rely upon up-to-date science and modern ranching approaches.

E. Long Term Management and Sustainability

The conservation easement for the Hathaway Ranch, held by SLT, ensures that the conservation values of the property will be maintained and protected in perpetuity. The landowners of the property will retain day-to-day management responsibility, and will continue to graze the property and the site. Improvements to the habitat, hydrology, or ranching infrastructure accomplished with these grant-funded plans will endure for generations because the SLT conservation easement will prevent land-use conversion or further residential development of these portions of the Hathaway Ranch and Oak Run Creek.

Future restoration projects, following plans developed in this grant, will likely be funded by the EQIP program of NRCS, the Partners Program from the US Fish and Wildlife Service, the Redding Rancheria fund of the Shasta Regional Community Foundation, and the DFG “fine fund” to improve habitat in our local area.

F. Performance Measures

1. Number of People Reached: Approximately 46

People directly reached through this project will include the landowners of the Hathaway Ranch (5), the ranchers leasing the property’s grazing rights (Hat Creek Grown; 5), students in the botany program (at least 3) and GIS program (at least 4) at Shasta College, the SLT Stewardship Team (20), and the SLT Lands Committee (9).

2. Dollar Values of Resources Leveraged for the Sierra Nevada: greater than \$300,000

This grant will fund the development of plans for future projects. These future projects will be funded by private donations and other grant sources such as the Natural Resources Conservation Service, the US Fish and Wildlife Foundation, the Shasta Regional Community Foundation, and others. The amount of other funding leveraged by these grant funds will be more clear when the actual plans are fully developed, but will likely be in excess of 10 times the amount of this planning grant for full implementation. Further, because these plans will inform and inspire similar plans for similar areas on other SLT easement properties, this planning grant will continue to indirectly leverage additional funds for our area for years to come.

3. Number and type of Jobs Created

SLT will hire contractors to complete specific restoration plans (at least 3), and contractors to complete permitting requirements (at least 2).

4. Number of New, Improved, or Preserved Economic Activities

This project will ensure the continued use of the property for ranching and agricultural use. The project will also ensure that the property continues to be used for recreation and educational events, thereby supporting other organizations' outreach and fundraising efforts.

17. Number of Collaboratively Developed Plans and Assessments: 5

This project will complete at least three site-specific restoration plans, one baseline report, and one plan for additional ranching infrastructure.

18. Percent of Pre-Project and Planning Efforts Resulting in Project Implementation: 100%

All of the restoration and site improvement plans developed in this grant will be implemented.

19. Measurable Changes in Knowledge or Behavior: Improved grazing practices to benefit riparian and in-stream habitat

The plans funded in this grant will result in improvements to the ranching infrastructure and reduced losses of land to erosion, which will all lead to a more healthy riparian system on Oak Run Creek and more grazing land available to agricultural uses.

G. Budget Narrative

By using existing partnerships and volunteers, the objectives of this grant application will be achieved in the most cost-effective manner possible. This project will utilize volunteer contributions from SLT's Board of Directors, Lands Committee and Stewardship Team to develop the restoration plans, baseline report, and permitting funded by this grant. Students from Shasta College will also provide volunteer expertise in the areas of mapping and plant identification. Technical assistance and advice on the plans will also be offered at no cost from agency partners such as NRCS, DFG, WSRCD, and the USFWS. In-kind contributions of time and expertise will also be provided by the AmeriCorps member serving at SLT.