Narrative

Project Description

The Wakamatsu Colony Farm Habitat Restoration and Enhancement Project ("the project") proposes the restoration and enhancement of 5 acres of riparian habitat, seasonal wetland buffer zone and pond habitat that are part of the 272-acre Wakamatsu Colony Farm. This project also proposes the development of an interpretive kiosk on the property that would enhance the interpretation of natural resources located on the subject property. The overarching goals of this project are to:

1) Restore and enhance the subject property's multiple natural resources to benefit the public and the wildlife of California.
2) Enhance the ability of the property to function as a working farm and cultural resource in El Dorado County's foothills.
3) Facilitate the property's use as an outdoor classroom for the El Dorado County students.

This project will improve and enhance aquatic resources on the property that have been neglected or over utilized as a result of legacy land use. This is an integral part of a larger effort on the part of ARC and its partners to improve the quality of rangeland and increase agricultural land production capacity in ways that are sustainable and that promote environmental and cultural resource stewardship at the Wakamatsu Colony Farm. This enhancement and restoration project will improve water quality in Granite Creek and Shingle Creek and enhance the hydrological function and biodiversity of associated wetland habitats. The project also seeks to provide interpretive enhancements to a site of state and national historical significance.

This project will enhance riparian, wetland, and lacustrine ecosystems typical of the Sierra Nevada foothill region. By establishing hedgerows, the wetland area will be buffered and protected from soil erosion and invasive weed encroachment. Native pollinators and predaceous insects will find protected habitat in the hedgerows and riparian buffers, contributing to increased pollination and biological control of pests. The seasonal stream that flows out of a large pond located on the property will be restored and enhanced. Years of unchecked cattle grazing, high flows and debris dumping have scoured the banks, created head-cut erosion and have separated the floodplain and stream zone, lowering the water table. The seasonal stream will be enhanced through a combination of bio-engineering techniques to re-contour and stabilize banks while reducing sedimentation, in addition to installing exclusion fencing to protect sensitive areas from grazing activities.

Restoration and enhancement activities will help preserve hydrological function in the area and the ability of wildlife to adapt to a changing climate. The property contains potential habitat for California Red-legged frog (*Rana draytonii),* a threatened species under the Federal Endangered Species Act. Enhancing and restoring suitable reproductive habitat for the species on the property would greatly benefit the species as its decline is substantial in the Sierra Nevada. Management of non-native invasive predator species such as largemouth bass and American bullfrog in the large pond will not only improve the property's suitability for future California red-legged frog colonization, but will also increase numbers of existing native amphibian and reptile species, such as western toad, western pond turtle, Sierra tree frog and California newt.

The property lies within the Sierra Nevada Foothills located in the South Fork American River sub-basin (HUC 18020129), which is located within the Lower Sacramento River Basin (HUC 180201). Rivers of the Sierra Nevada and the Sacramento River Basin are a significant, major source of drinking water for the entire state. As such, the project's improvements in water and soil quality, and reductions in erosion and sedimentation contribute to the overall health of the state's water quality. This project will enhance agricultural productivity on the Farm and adjacent agricultural lands by improving the water-storing capacity of local wetland habitats, stabilizing stream banks, encouraging native pollinators and removing invasive plants.

The location of the property is in western El Dorado County 40 miles due east of the State Capitol in Sacramento. The site location ("Wakamatsu Colony Farm" or "subject property") within this project proposal consists of 272 acres (seven parcels) approximately 6 miles north of Placerville, CA on Cold Springs Road. This parcel is located in Township 11 N., Range 10 E., Sections 29 and 32, M.D.M. The reference address is 941 Cold Springs Road. The subject property contains a small lake, six undeveloped springs and unique low elevation wetland complexes that feed two major tributary streams to the South Fork American River (Granite Creek and Shingle Creek).

Project Summary

The Wakamatsu Colony Farm Habitat Restoration and Enhancement project proposes the restoration and enhancement of riparian habitat, seasonal wetland habitat, pond habitat, annual grassland and oak woodland habitat that are part of the 272-acre Gold Hill Ranch. The subject property contains a small lake, six undeveloped springs and unique low elevation wetland complexes that feed two major tributary streams to the South Fork American River (Granite Creek and Shingle Creek). This enhancement and restoration project will improve water quality in the streams and enhance the hydrological function and biodiversity of the wetland habitats. The property is a site of statewide and national historical significance. The Gold Hill Ranch is the site of the first

Japanese settlement in North America, the Wakamatsu Tea and Silk Farm Colony (1869) and the gravesite of Okei Ito, the first Japanese woman to be buried in North America. The subject property also contains land with soils of unique and statewide importance, some of which are currently being leased to two farmers to grow organic produce. This project will enhance annual grasslands used for livestock grazing and hay production, walnut, persimmon, and apple orchards, as well as other planned agricultural uses.

This project includes the restoration and enhancement of a seasonal wetland and streams, invasive species management in the large pond and installation and maintenance of native hedgerows. Hedgerows consist of native trees, shrubs, perennial grasses, forbs, rushes, and sedges in three distinct rows, or zones. Hedgerows benefit both agricultural landscapes and wetland areas by enhancing weed control, protecting air quality, improving water quality, and reducing soil erosion. Native hedgerows can further increase species richness and abundance, create valuable wildlife corridors, and benefit both pollinators and predatory insects.

All aquatic resources on the landscape have been degraded by over a century of conventional livestock grazing. The stream channel to be restored shows signs of erosion, down cutting, widening and sedimentation. Yellow star thistle, medusa head, and other introduced invasive species have spread throughout the property; yellow star thistle dominates the annual grassland landscape and borders either side of the riparian channels. A number of invasive fish inhabit the ponds: small-mouthed bass, bluegill, mosquito fish, and Florida largemouth bass. Additionally, the introduced American bullfrog inhabits all ponds located on the property. The property contains potential habitat for California Red-legged frog (*Rana draytonii),* a threatened species under the Federal Endangered Species Act. Enhancing and restoring suitable reproductive habitat for the species on the property through invasive predator management would greatly benefit the species as its decline is substantial in the Sierra Nevada.

This project has already started (April 2012), in part due to funding from the Environmental Enhancement and Mitigation Grant Program. However, in order to complete the project as described, additional funding is needed. Restoration planning, site assessments and CEQA documentation are complete, which make this project ready to proceed.

Environmental Setting Narrative

The site is located in portions of Sections 29 and 32, Township 11 North, Range 10 East, M.D.M., and is physically found approximately 6 ½ miles northwest of Placerville and 2 miles south of Coloma near the South Fork of the American River. Gold Trail

School (10 acres) is situated in the center of the property on the east side of Cold Springs Road, while the remaining surrounding land uses are rural residences and agricultural lands. The zoning for the subject property by the adopted El Dorado County General Plan is “AL.” This zoning provides for agricultural use. Topographically the site consists of mostly flat land and gently sloping east and west trending hillsides. The subject property is intersected by two intermittent creeks, Granite Creek and Shingle Creek, as indicated by broken blue lines on the Coloma 7.5 minute USGS topographic map. Elevations range from approximately 1,200 feet to just over 1,600 feet. Aspect consists primarily of north and northwest facing slopes. The vast majority of the subject property is fairly flat (2-5% slope), but some hill sides may average from 10 to 30% slope.

The Wakamatsu Colony Farm receives approximately 36 inches of annual rainfall, on average (from the Soil Survey of El Dorado Area). The site is located within the South Fork American River watershed (Hydrologic Unit Code 18020129). The South Fork American River is a sub-unit of the American River watershed. The South Fork American River has developed as an east to west flowing river with its headwaters originating in the Desolation Wilderness Area in the Eldorado National Forest in El Dorado County.

Hydrologic features present on the subject property are identified on the topographic map and aerial image map. Granite Creek and Shingle Creek, both tributaries to the South Fork American River, find their headwaters on the Wakamatsu Colony Farm. Granite Creek begins as a small drainage in the southeast corner of the property. It feeds a small lake and a pond located in the central portion of the subject property. Granite Creek, which drains from the small lake, is a seasonal drainage that meets with the South Fork American River in Lotus. Shingle Creek, also seasonal, flows northwest to its confluence with the South Fork American River just upriver of Granite Creek. The presence of alluvial soils and wetland vegetation on the subject property suggests periodic flooding of Granite Creek and Shingle Creek. Large rainfall events coupled with an unusually wet year would cause the spillway of the lake to release large amounts of water, spilling into the stream channel. Large deposits of sandy loam, sand and decomposed granite would then collect along the banks of the stream, washed downstream by the flooding event. Groundwater stored in the fractures of rock is another source of water on the site; shallow seasonal groundwater absorbed by soils and slowly released to the small lake, a pond and associated springs after rainfall events also contributes to the site’s hydrology.

Several soil types are found at the Wakamatsu Colony Farm, including two types of hydric soils present – Sierra rocky sandy loam, 5 to 15 percent slopes (SgC) and Placer diggings (PrD). Other soil types include Auberry Coarse Sandy loam, 5 to 15 percent

slopes (ArB and ArC); Auberry rocky coarse sandy loam, 5 to 15 percent slopes (AsC); Auberry very rocky coarse sandy loam, 15 to 30 percent slopes (AuD); Alluvial Land, 2 to 5 percent slopes (MpB) and Sierra sandy loam, 9 to 15 percent slopes (SfC2). Of these soil types, one (ArB) is considered "Prime Farmland" by the USDA Natural Resources Conservation Service (NRCS) and two soil types (AsC and SgC) are considered "Farmland of Statewide Importance" by the USDA NRCS.

There are four main habitat types as identified by the CalVeg Layer (Forest and Range Assessment Program, 2005): Annual grasslands (45.8%), Montane Hardwood (38.5%), Riparian (11%), and Lacustrine (1.6%). All habitat types provide a specialized niche for types of species that interact in the natural community. Overall, the property is characterized by gently rolling hills dominated by annual grasses and native oaks (blue oak, interior live oak and valley oak).

Workplan and Schedule Narrative

Portions of the project have already commenced, using matching funding from REI and the Environmental Enhancement and Mitigation Grant Program (EEMP). Sierra Nevada Conservancy-funded activities and project deliverables are described in the table below. Project work and schedule is dependent on weather conditions and seasonal patterns, as most project work involves planting, irrigation and work within a seasonal stream corridor.

DETAILED PROJECT DELIVERABLES	TIMELINE
SNC Project Activities Start Date	June 1, 2013
Commence Stream bank Stabilization work	June 1, 2013 through October 15, 2013
Invasive species management in pond	July through November 2013
1st 6-month Progress Report to SNC	December 1, 2013
Native Planting in Hedgerow area and along stream/riparian area	November 2013 through March 2014
Weed maintenance, irrigation maintenance	Ongoing throughout spring/summer
2nd 6-month Progress Report to SNC	June 1, 2014
Invasive species management in pond	July through November 2014
2nd round of Native Plant installation in Hedgerow area and along stream/riparian area	November 2014 through March 2015
3rd 6-month Progress Report to SNC	December 1, 2014
Install Fencing along stream bank and pond embankment to keep grazing confined to specific areas	April 2015
Weed maintenance, irrigation maintenance	Ongoing throughout

	spring/summer
4th 6-month Progress Report to SNC	June 1, 2015
Invasive species management in pond	July through November 2015
Final Grant Report to SNC	December 1, 2015

Restrictions, Technical/Environmental Documents and Agreements Narrative

Restrictions/Agreements: The Property is currently protected by a Conservation Easement held by Placer Land Trust (PLT). PLT is aware and in support of the proposed restoration and enhancement project on the Wakamatsu Colony Farm property. The project is also in accordance with the permitted uses outlined in the recorded Grant Deed of Conservation Easement (see item h). The Farm Lease is also included in this proposal.

Regulatory Requirements/Permits: Permits that will be required as part of this project include:

- Department of Fish and Game - Streambed Alteration Notification Package and Permit (application/notification package currently being prepared by ARC staff.)
- Army Corps of Engineers – Section 404 Permit for work near a wetland (application is currently being prepared. Consultation with ACOE staff by phone has been initiated.)

Organizational Capacity Narrative

The American River Conservancy (ARC) has dedicated staff that will be able to facilitate the completion of this project in coordination with the various project partners and contractors. The American River Conservancy has significant experience managing and successfully completing restoration and habitat enhancement projects, including the enhancement of reproductive habitat for the threatened California red-legged frog, and restoration of oak woodland habitat on BLM lands. Key staff involved in carrying out this project includes Elena DeLacy (Conservation and Stewardship Project Manager) and Kristin Powell, Stewardship and Outreach Assistant and Sierra Nevada AmeriCorps Partnership Member (SNAP). Other ARC personnel that will assist with project activities involving student volunteers include Molly Hucklebridge (Environmental Education Program Manager) and Lindsay Raber (Environmental Education Specialist).

Project partners, such as the California Conservation Corps (CCC Greenwood Center) will be integral to project activity completion and will provide services related to stream bank stabilization, planting and other tasks that involve a great deal of manual labor. All stream-bank work will be completed using hand crews, in order to avoid the costs and disturbance incurred by mechanized equipment.

Volunteers have been instrumental in project development and will continue to be involved in project implementation. Rebecca Allen (Ph.D.) was able to provide a cultural resources report and survey in 2010. This document was referenced in the process of project planning and development. Volunteers from CNPS, most notably Annie Walker, conducted a series of botanical surveys and created a plant list for the property. Alissa Fogg, Sierra Nevada Program Biologist for PRBO Conservation Science, led efforts to identify and count bird species present on the Wakamatsu Colony Farm. These efforts resulted in a bird species list for the property.

Cooperation and Community Support

The Wakamatsu Colony Farm Project, since its inception in 2007, has garnered support from a diverse set of stakeholders and partners. Several agencies and foundations have contributed to the initial acquisition of the 272-acre Ranch. These important contributors include the Sierra Nevada Conservancy (SNC), Natural Resources Conservation Service (NRCS) Farm and Ranchland Protection Program, Royal Bank of Canada and many other foundations, individuals and groups that are too numerous to list here. From local partners such as El Dorado County Chamber of Commerce and the Gold Trail Union School District, to distant partners such as the City of Aizu Wakamatsu, Japan, the breadth of conservation, agricultural, interpretive and educational partnerships is remarkable. Hundreds of volunteers, including the California Conservation Corps (CCC), community organizations such as local Boy Scout troops and Trout Unlimited, will be involved in the installation of hedgerows, wetland restoration, monitoring and maintenance.

The first Japanese Colony in North America – the Wakamatsu Tea and Silk Colony– was founded at Gold Hill Ranch in 1869. The colony carries the distinction of being the only samurai colony ever established outside of Japan; furthermore, Okei Ito, the first Japanese woman buried on American Soil, lived and died on the property. Her gravesite, a pilgrimage site for many Japanese and Japanese-Americans, remains on the property. In 2009 a portion of the property containing the historic house and grave site was placed on the National Register of Historic Places at a level of “National Significance.” Historic tours are conducted on the property to educate the public about the cultural history and significance of the area.

Implementing the ARC’s existing P.E.E.R. program with local El Dorado County schools will bring hundreds of students to the property. This environmental education program gives students the opportunity to learn standards-based science with a hands-on approach that teachers are ordinarily unable to provide. In addition to learning about and participating in water quality monitoring, students will directly participate in the project performing native plant restoration, stream bank stabilization, invasive weed

removal, and hedgerow plantings. Furthermore, public workshops on invasive and native plants, hedgerows, riparian restoration and native biodiversity monitoring will be provided on the property.

In September 2012, a 10-acre organic farming operation commenced on the southern most portion of the Wakamatsu property, adjacent to the hedgerow installation area and protected wetland and associated Granite Creek channel. Besides providing fresh, healthy produce to the local community, this partnership between the farmers (South Fork Farms) and the American River Conservancy will strive to use portions of the farm as a working demonstration garden for schools and the public. Already the property has served as the location for a fun-run (May 2011 and 2012) put on by Gold Trail Unified School District (4th-8th grade school situated in the center of the property), a willing partner in the project eager to have its students learn about and visit the property. The project provides opportunities for local schools and communities to learn about watersheds, agriculture, history, and the restoration of aquatic resources, oak woodlands, and annual grasslands.

Utilizing over thirty volunteer stewardship days and educational programs, the Wakamatsu Colony Farm Restoration and Enhancement Project will bring over 500 people to the property per year to assist in making the project a success. To date, a year-long volunteer, part of the Sierra Nevada AmeriCorps Partnership (SNAP), has already commenced work on the site and will help with recruiting and coordinating volunteers. Two Green Job Corps members worked on site for 2 months, performing debris removal from creeks and buildings. Volunteers and students will be involved for years in learning and performing habitat and wetland restoration and the associated maintenance of the land.

Letters of support from the Placer Land Trust (PLT), US Fish and Wildlife Service (USFWS), CalFire, Recreational Equipment Incorporated (REI), and the Gold Trail Union School District are included with this application. We have a partner contract signed with the California Conservation Corps (CCC) Greenwood Center as well as verbal and email commitments from Trout Unlimited and Boy Scout Troop 117 based in Shingle Springs.

Long-Term Management and Sustainability

The American River Conservancy acquired fee title interests in the Wakamatsu Colony Farm in November 2010, simultaneously transferring the Conservation Easement to the Placer Land Trust. The Grant Deed of Conservation Easement is the document that serves as an overarching planning template, as it outlines permitted and prohibited uses of the property. The Wakamatsu Colony Farm Land Use Plan was approved by the

American River Conservancy Board of Directors in September 2012. This plan outlines overall management recommendations for the 272-acre farm and also provides guidance to the American River Conservancy Board and Staff in prioritizing management actions and pursuit of funding. A Restoration Plan for the property was also completed in 2012. The restoration plan provides detailed descriptions of restoration and enhancement activities on the Wakamatsu Colony Farm. In addition to the Land Use Plan and the Restoration Plan, the American River Conservancy's 2011 SNAP member, Tyler Schade, created a Farm Conservation Plan, which describes measures to improve and enhance the agricultural productivity for the Farm and suggests methods to improve the conservation values of the property. The Land Use Plan is included in the Supplemental and Supporting Documents Section.

The 272-acre Wakamatsu Colony Farm has many unique qualities that prompted the American River Conservancy to become involved in the conservation and stewardship of the property after being approached in 2007 by the previous owners (Veerkamp family). These diverse qualities also make the project attractive to funders and qualify it for support from multiple sources. The site supports a diverse array of native plants and wildlife, serves as the headwaters for two tributaries to the South Fork American River and contains a rich mosaic of seasonal wetlands and oak woodlands. Current agricultural uses include a walnut orchard and a leased 10-acre organic produce farm operation. Future, planned agricultural uses include expanding the working farm area to include grain crops, grazing areas and animal husbandry. There is also a deep thread of history that infuses the project with intrigue and inspires a diverse community of supporters from all over the world. The American River Conservancy and its partners would eventually like to open the property to the public as the "Historic Wakamatsu Colony Farm." To this end, land use planning by the ARC has retained conservation of the Farm's biological, cultural and agricultural resources as a core value. Future habitat restoration and enhancement, agricultural development, trail construction and historic building restoration activities will serve to enhance and improve the property's ability to serve as an economically viable, ecologically sustainable and culturally relevant endeavor.

Performance Measures

This project will use the following performance measures:

1. Number of People Reached: This performance measure will track the progress of volunteer involvement in restoration and enhancement activities. This can be measured by the number of people who participate in project activities.

2. Dollar Value of Resources Leveraged for the Sierra Nevada: This measure is based on additional funds, volunteer hours and in-kind donations received as a part of this project.

3. Number and Type of Jobs Created: This project has the potential to create new temporary job opportunities in the Sierra Nevada as a result of the SNC-funded activities. More specifically, these job opportunities relate to contractual services rendered in the course of project completion.

4. Number of New, Improved, or Preserved Economic Activities: This performance measure is relevant to this project because its result will be improved and preserved economic activities such as agricultural production and agricultural tourism.

5. Acres of Land Improved or Restored: This measure is a straightforward outcome based on direct improvements or restoration activities as a result of the project.

6. Linear Feet of Stream Bank Protected or Restored: This PM is relevant to this project because there will be a measurable result from stream bank enhancement and stabilization activities.

Budget Narrative

The Wakamatsu Colony Farm Habitat Restoration and Enhancement Project has an estimated project cost of $140,950. The American River Conservancy is requesting $51,550 (or 37% of total project cost) from the Sierra Nevada Conservancy to complete this project. The American River Conservancy anticipates that the bulk of project activities would be completed in three years (2013 through 2015). The bulk of project costs are in project management, contractual labor as well as project coordination. Some contractual work will also completed by local CCC Greenwood Center employees. This project is cost effective in that it utilizes local, skilled labor from the CCC. The contract with the CCC is performance-based, meaning that the crew is under contract to complete the project as described for the contractual fee, even if it takes longer than estimated. It also maximizes in-kind volunteer support to perform maintenance on native plants, and utilizes a bulk discount on native plants from a local supplier.

Additional project funding has been secured from REI ($5,000), Patagonia ($4,000) and the Environmental Enhancement and Mitigation Program ($75,000), for a total of $84,000. In-kind support from American River Conservancy volunteers, valued at $5,400 is also expected.