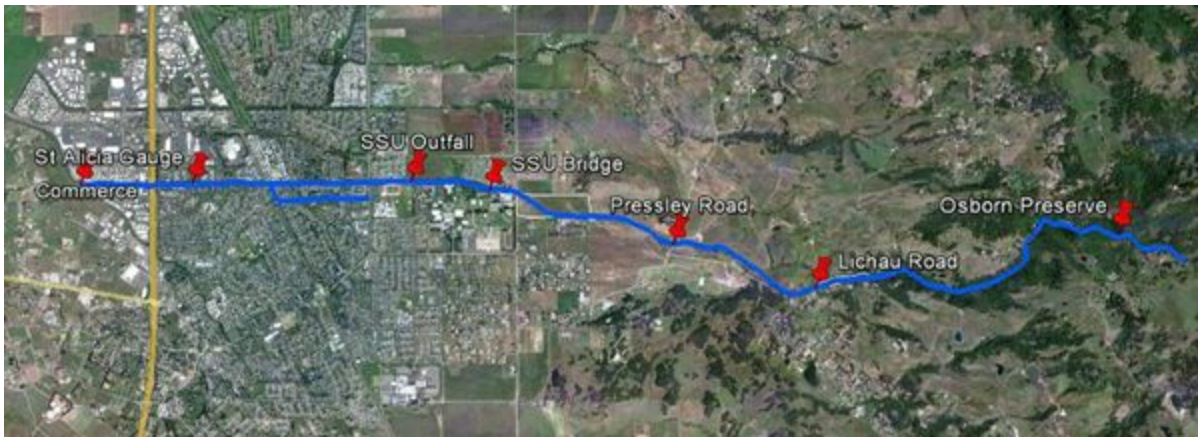
U.S. Coastal Conservancy Application



Total Budget: $144,050

December 10, 2015
Copeland Creek Restoration Plan
Sonoma State University
Vanessa Fonti
Noah Henry
Shaunice Newton
Megan Stock
Nick Stone
Environmental Studies and Planning Department
1801 E. Cotati Ave.
Rohnert Park, CA 94928

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GRANT APPLICATION – COVER PAGE

CONTACT INFO

Organization	**ENSP-423**		
Contact Person	**Megan Stock**	**Email**	**stockm@sonoma.edu**
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Address	**1801 E. Cotati Rohnert Park CA 94928**		

PROJECT INFO

Project Name	Copeland Creek						
Summary	Increase public access to Copeland Creek to create an educational, recreational, and safe amenity to the community and campus in order to increase public awareness of the creek and services it provides as an intact habitat.						
Total Project Cost	**$**			**Amount Requested**		**$1,000,000**	
Start Date	**2016**			**End Date**		**2020**	
Project Type (check all that apply)	Planning x Access x Habitat Conservation/Enhancement x Urban Waterfront		Acquisition Agricultural Preservation		Implementation/Construction Climate Change Urban Greening		
Acres	**15**	**Trail Miles**		**APNs** (Acquisition Only)			

LOCATION INFO

County	Sonoma	**Specific Location**	Sonoma State University	
Latitude	38 20’ 35.69” N	**Longitude**	-122 41’ 5.11” W	
What point is represented by the lat/longs (eg., parking lot, center of site, etc):		**The middle of Copeland Creek going through Sonoma State University.**		

ELECTED OFFICIALS

Districts	**Number(s)**	**Name(s)**
State Senate		Dianne Feinstein and Barbara Boxer
State Assembly		
Congressional		

GRANT APPLICATION – PROJECT DESCRIPTION

Complete each of the elements of the project description below with clear, but detailed answers. Limit your response to this section to no more than four pages if possible.

1. **Need for the project.**

Copeland Creek is a perennial stream with significant habitat and ecological value. It runs through Sonoma State University’s campus where it has become an asset to the community around it, however there are some issues within and around the creek that need to be met in order for the community’s full enjoyment of this valuable ecosystem.

- Obstructive underbrush
    - There are unnecessary bunches of underbrush along Copeland Creek that are both un-aesthetically pleasing and uninviting to the eye. Patches like Himalayan Blackberry can grow into a wall that could potentially be hazardous to community

members, especially small children. This project will create a more welcoming aesthetically pleasing environment that the community member will enjoy while at the same time promoting beneficial native species by planting native species in the areas were Himalayan Blackberry was removed.

- Lack of sufficient lighting
    - The bike/walking pathway along Copeland Creek is frequently used by community members both in the day and at night. This area of the creek is does not have sufficient lighting and it a safety concern at night. This plan plans to implement more lighting in this area for the public's safety, while trying to not create a lot of light pollution along the creek side.
- Lack of Education
    - Not many of the community members know about Copeland Creek's history, nor do they know of any of the restoration efforts that take place in and around the creek. Informing the community on this marvelous ecosystem and the services it provides by holding open to the public talks, is another concern this plan addresses.
- Workers/Volunteers
    - Help is needed in order to achieve our goal. Community member are the perfect candidate because they can learn about Copeland Creek, its history and the services it provides, help maintain an essential element in their community, and they can enjoy the fruits of their labor (Copeland Creek) once the work has been done.
- Flood Control
    - This action plan will serve to coordinate and streamline flood control efforts and result in multi-benefit flood projects, helping to mitigate the significant investments needed to improve flood protection for existing communities and infrastructure.

2. **Goals and objectives.**

Goal:

Increase public access to Copeland Creek to create an educational, recreational, and safe amenity to the community and campus in order to increase public awareness of the creek and services it provides as an intact habitat.

Objectives:

Threat:

- By 2020, increase public access by clearing out and/or trimming 80% of the unnecessary underbrush, the Himalayan blackberries, and replace them with beneficial native species.

Viability:

- By 2020, make a trail for recreational use on the South side of the creek, four to five feet wide. Create rest spots where people can relax, appreciate and learn about nature without disturbing the wildlife.
- By 2017, add two to three motion sensor lights on the art building and one to two standing lights facing the creek to give lighting to the public at the trail entrances/exits.
- By 2018, Implement a strategy to improve flood control and to stabilize the river banks in preparation for future storms.
- Remove certain willow trees, in which splitting parts pose a potential threat to the safety of humans and increase the chances of blocking waterways.
- Replace the willow trees removed with other vegetation which stabilizes river banks and reduces erosion
- Maintain and protect non dangerous vegetation along river banks.
- Repair and protect any erosion spots on the riverbanks with a variety of techniques such as the addition of grasses, straw matting, live crib walls, stone walls, gabions, and more.
- Monitor the area before and after storms to look for hazards.

Education:

- Starting Fall semester 2016, educate the community about Copeland Creek, by having 2 talks per semester in the colloquiums in classrooms and to the public to increase awareness.

Capacity:

- By the Fall semester of 2017, have more organizations involved in maintaining Copeland Creek. For example, SSU Students could partner with FOP by creating a club that will overlook the process of the rehabilitation of the creek.

3. **Site Description.**

Copeland Creek is a 9 mile long stream with the potential of becoming a significant habitat with ecological value. It consists of a semi-natural channel within the campus and carries steelhead salmon when there is water in it. The mouth of Copeland Creek is located at Laguna de Santa Rosa. This project will focus on the segment of Copeland Creek that goes through Sonoma State's campus. This section goes through the campus from east to west for approximately 3,600 feet. It connects the portion of Copeland Creek which goes through urban Rohnert Park and the portion going through rural agricultural properties to the east of Sonoma State's Campus. This piece is part of the Laguna de Santa Rosa watershed. The creek is usually dry (at least in the segment that goes through Sonoma State's Campus) and is surrounded by various vegetation species.

The Himalayan blackberry is particularly noticeable and dense. However, parts of the creek bed and the surrounding vegetation look reasonably cleaned up and under control. In other areas,there is graffiti on some of the trees and scattered litter on the ground. Also noticeable are a number of dangerous willow trees with splitting parts or that are leaning slightly over the creek. There are a number of invasive plant species.

The segment on campus also sees many feral cats roaming around within its borders. To the northeast and across from the Creek are parts of Sonoma State University, which included Cabernet Village, The Environmental Tech Center, the art building, and parking lot A. To the north of the east end is the Green Music Center. A bridge connects the Green Music Center with the rest of Campus by forming a path over Copeland Creek. There are also patches of the site with dead and dried up vegetation surrounding the creek bed. Most times of the year, the creek is dried, however during storms, the creek can fill.

4. **Specific Tasks.**

#	Task Name	Description
1	Removal of unnecessary underbrush	● Removal of 80% of either unnecessary, aesthetically displeasing, or uninviting underbrush within the south side of Copeland Creek ● Replant beneficial native species in place of the removed species
2	Access to creek	● Repair already established pathways to and from the creek ● Create a main recreational use trail for the enjoyment of the community

3	Safety around Copeland Creek	● Input 2-3 motion sensor lights along the Sonoma State University's Art building that is facing towards the Creek ● Input an additional 1-2 light poles along the walking/biking pathway in between Sonoma State University's Art building and the Copeland Creek ● Remove certain willow trees, in which splitting parts pose a potential threat to the safety of humans and which increase the chances of blocking waterways. ● Replace the willow trees removed with other vegetation which stabilizes river banks and reduces erosion. ● Maintain and protect non dangerous vegetation along river banks. ● Repair and protect any erosion spots on the riverbanks with a variety of techniques such as the addition of grasses, straw matting, live crib walls, stone walls, gabions, and more. ● Monitor the area before and after storms to look for hazards.
4	Education about Copeland Creek	● Give open to the public talks at Sonoma State University about Copeland Creek e.g. Creek history, restoration efforts, flora and fauna that reside in the creek, etc.
5	Community involvement/ Volunteers	● Get organizations more involved in maintaining Copeland Creek i.e. Fairfield Osborn Preserve, etc. ● Get community members and Sonoma State University's students on board with interacting, learning, and actively maintaining Copeland Creek

5. **Work Products.**

- By 2017 install motion sensing lights on to the art building facing the creek
- By 2017 install one street lamp by the between the art building and the butterfly garden trail.
- Have an accessible riparian area for the public to use by 2020. The riparian area should include a trail along the length of our reach, and the riparian area should be free of Himalayan blackberry bushes.

6. **Measuring Success.**

Our plan involves restoration and construction. The restoration part of our plan involves replacing Himalayan blackberry habitat with native habitats that will persist in excluding monocultures of blackberry or other species that will impede the accessibility of the creek. The construction part of our plan involves development of trails that will facilitate access to the creek and creekside rest spots along the southern bank of Copeland creek.

Monitoring for restoration effectiveness will be conducted at the end of 2016, 2017, 2018, and 2019:

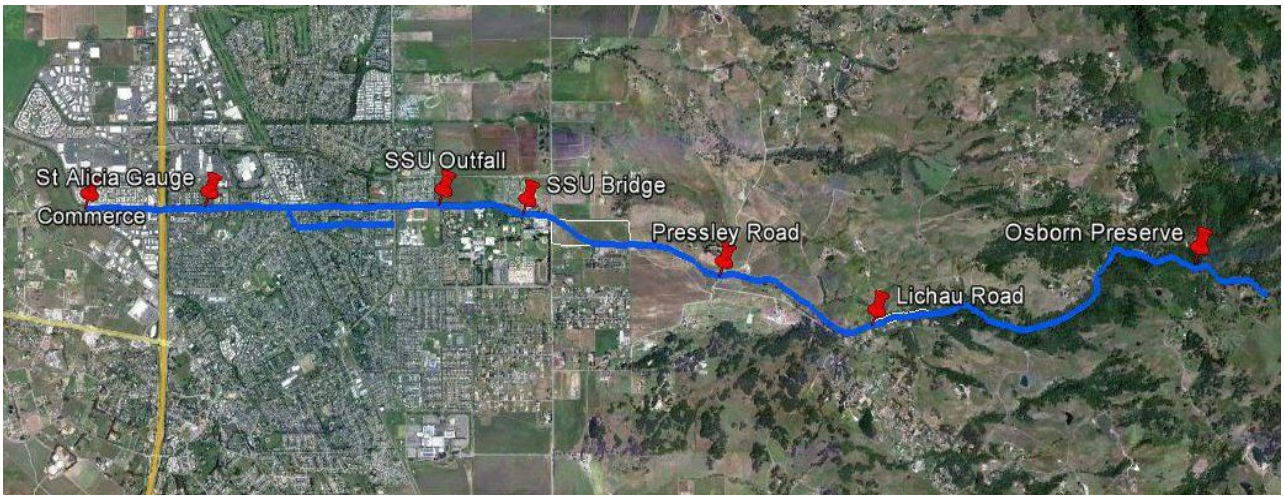
- At the end of 2016, there shall be investigation and reporting of possible impacts of restoration as is planned. There shall be coordination with all interested parties to keep the plan in accordance with the benefits of the public with regard to a sustainable riparian environment.
- At the end of 2017, if the current objectives were still found viable, 30% of riparian habitat dominated by Himalayan blackberry shall have the blackberry removed and the cleared land revegetated with plants exclusionary to Himalayan blackberry.
- At the end of 2018, 70% of riparian habitat dominated by Himalayan blackberry shall have the blackberry removed and the cleared land revegetated with plants exclusionary to Himalayan blackberry.
- At the end of 2019, 100% of riparian habitat dominated by Himalayan blackberry shall have the blackberry removed and the cleared land revegetated with plants exclusionary to Himalayan blackberry.
- At the end of 2020, riparian habitat shall be free of Himalayan blackberry fully revegetated with plants exclusionary to Himalayan blackberry.

Monitoring for Construction effectiveness will be conducted at the end of 2016, 2017, 2018, and 2019:

- By the end of 2016, full public inquiry shall be developed and executed to determine how people living nearby currently use the creek and how it would be used in the future. SSU facilities will also be worked with to provide plans for most effective placement of lighting fixtures.
- By the end of 2017, the lighting fixtures shall be affixed and operational along the (currently) dark part of the trail. The existing trail entrances at either end of the paved road shall have 5 foot swaths cleared and the ground graded evenly along this swath for ease of walking. Hanging blackberry vines and intruding vegetation of other kinds along these trails will be removed.

7. **Project Maps and Graphics.**

As you can see here, the creek flows right next to Sonoma State University. This section of the creek is the site location of our project.



Here is a picture of Copeland Creek in its entirety. It flows from the Fairfield Osborn Preserve all the way through Sonoma State University, and then discharges in the Laguna de Santa Rosa.

We are planning to put two motion sensor lights on the side of this building (The Art Building). The lights will be far enough from the creek where small animals will not set off the light and scare them away. However, it will be close enough where people will set off the light while on this road. This will increase the safety of people who are walking or running beside the creek at night.

The picture below is the creek site facing East, towards Snyder Drive. On the left is the Art Building where we are putting the motion sensored lights.

Above is a picture of the overgrown Himalayan Blackberry bushes that we are planning to get rid of.

GRANT APPLICATION – PRELIMINARY BUDGET AND SCHEDULE

In the budget matrix below, relist the tasks identified in #4 above and for each provide: 1) the estimated completion date for the task, 2) the estimated cost of the task, and 3) the funding sources (applicant, Conservancy, and other) for the task.

Task Number	Task	Completion Date	Applicant's Funding	Coastal Conservancy	Other Funds	Total Cost
1	Removal of Underbrush	2018				**$ 75000**
2	Access to Creek	2020				**$ 50000**
3	Safety around Copeland Creek	2017				**$ 2500**
4	Education	2016				**$ 3000**
5	Community Involvement/ Volunteers	2016				**$ 12550**
TOTAL			**$ 0**	**$ 0**	**$ 0**	**$ 144,050**

In Kind Services

In-kind services or contributions include volunteer time and materials, bargain sales, and land donations. Describe and estimate the value of expected in-kind services.

GRANT APPLICATION – ADDITIONAL INFORMATION

1. **Project and Applicant History:**

As of now, the project team is not working directly with any organizations that have participated in conservancy projects for our length of Copeland Creek. Sonoma State University and several other organizations have had a hand in altering the channel morphology, nutrient processes, and biological composition of our section of the Copeland Creek Riparian area, but

we have yet to involve them in our project plan. This project is not related to any other previous or proposed conservancy projects

2. **Environmental Review**:

Our project is exempt under CEQA because it is a small habitat restoration project as defined in article 19, section 15304 of CEQA. Our project would fall into the category of exemptions as a "Minor Alteration" to the land because our project does not involve removal of healthy, mature, scenic trees. Furthermore, any alterations to the land, water, and vegetation are minor and will result in improvement of habitat for wildlife.

3. **Support:**

At the moment, our project team does not have the support of any public agency, non-profit organization, elected official, or other entity or individual. Our plans include coordinating with SSU facilities, and SSU preserves.

4. **Regional Significance:**

Our reach of Copeland Creek riparian area has been anecdotally noted as a wildlife corridor (mountain lions, coyote, deer, etc). Each of our objectives is shaped around providing a space for the public to understand and appreciate their shared natural resources. The trails will provide spaces for people to see a variety of flora and fauna along the creek. Removal of the Himalayan blackberry will allow for more accessibility and greater variability of habitats.

5. **Need for Conservancy Funds:**

Funding is a very important aspect for our project however, if we are not able to receive the funding we need, we would still be able to achieve some, if not all, of our goals. Our plan is very dependent on our Copeland Creek Club at SSU that we will be starting over the next year. This club will put together many fundraisers through the school and outside of the school as well. Bake Sales outside of our local Oliver's Market, Dine and Donate events at Mary's Pizza Shack or at Lobos on campus, are a few of the many fundraising events we can organize.

If we do not receive any funding, it may be possible that we can collect donations and tools from the community. We will be in contact with Suzanne from Fairfield Osborne Preserve, and hopefully we will be able to borrow her tools to get rid of the invasive blackberry. It will be a lot more work if we do not receive the funding we need, but there are many back-up plans that we have to help us achieve our goals. What we would lose is the support for labor costs if we don't have as many volunteers that we are hoping for.

6. **Consistency with State Plans:**

CA Wildlife Action Plan

-The CA Wildlife Action Plan helped create the California Noxious and Invasive Weed Action Plan, which describes how we can prevent or stop invasive weeds from taking over. Our plan would be support this by working to rid the Himalayan Blackberry bushes that are taking over Copeland Creek.

State and Federal Species Recovery Plans

-West coast Steelhead are endangered where we are in California. Steelhead used to swim through Copeland Creek and nest there as well, but now there isn't any water or Steelhead. Cleaning up Copeland Creek and making it a better suitable habitat for these fish will directly contribute to the Endangered Species Act.

8. **Vulnerability from Climate Change Impacts Other than Sea Level Rise:**

As of November 2015, California is in a serious drought. This is a huge climate change impact that is currently affecting Copeland Creek. At this time there is no water in the creek in our site area. The drought caused immense habitat and species loss in and around the creek. Steelhead used to inhabit the creek, as well as some salamander species. There is no way to reduce this vulnerability, except to plan for the future, when there is hopefully water again. Since it is El Nino this year, we are expecting there to be plenty of rain this coming fall and winter of 2015. Until then, we can use this problem to our advantage by cleaning the trash and invasive species out of the creek bed while it is still dry. We are planning to plant helpful species around the creek that will take the place of invasive species. Certain tree species can act as habitats for many species in and around the creek. Willows can create nesting spots in the creek for fish to live and breed. Some other plants/tree species will help keep erosion to a minimum, by stabilizing the creek with their roots.

9. **California Conservation Corps:** Applicants proposing construction projects are urged to consider using the California Conservation Corps. If your project involves construction, please indicate whether you have contacted the Corps regarding your project and the results of that contact. Applicants seeking Proposition 1 funding must consult with the Corps, as described in the Proposition 1 Supplemental Questions.

10. **Willing Seller:**

Since this project does not involve the acquisition of property, there will be no need for landowner negotiations.

11. **Greenhouse Gas Emissions/Climate Change:** If the proposed project will result in production of greenhouse gas emissions (including construction impacts and vehicle miles travelled as part of a public access component), describe the measures your project includes to reduce, minimize or avoid greenhouse gas emissions through project design, implementation construction, or maintenance (Refer to Exhibit F: Climate Change Guidance for resources on Best Management Practices and green building techniques and materials). What, if any, are the possible sources or sinks of greenhouse gases for your project, such as carbon sequestration from habitats at the site? If one of the project goals is to sequester carbon (reduce greenhouse gas concentrations), how do you intend to ensure continued long term sequestration while achieving project objectives? Do you have any plans to seek carbon credits for the carbon sequestration activities on the project site?

The first step in this process will be to identify the top sources of greenhouse gases in the project. The amount of greenhouse gases being emitted will be identified and calculated. How these greenhouse gases are emitted will also be noted. The main source of greenhouse gas emissions in this project will be from transportation. Transportation emissions will be caused by the delivery of construction materials and other supplies to the site. In addition, those involved with the project will most likely be driving inefficient cars to the site. A intention of this project is to use alternative and more efficient vehicles to deliver these materials when possible in order to cut down on greenhouse gas emissions. Staff working on the site will be encouraged to look into cleaner cars. Another strategy is to use alternative vehicle fuels and technologies, which don't emit as much co2 per mile.

Additional strategies to reduce greenhouse gas emissions from transportation include using construction and non-construction vehicles as efficiently as possible. For example, the project will attempt to use the minimum amount of vehicle supply trips as possible. In addition for staff and volunteers working at the project site, the amount of vehicles used to get to the site will be minimized by car pooling. Also the closest qualified construction companies and staff necessary for the project, would be hired in order to reduce travel distance.

Taking away dangerous trees and non-native and exotic species such as Himalayan blackberry can release stored co2 emissions to the atmosphere and impact the environment of Copeland Creek. However the project will limit vegetation removal to the bare minimum and conduct it slowly over time. In addition, adding more vegetation than decreasing will offset the

vegetation loss. Ideally the vegetation added will be primarily native species. The photosynthesis carried out by vegetation surrounding Copeland Creek is a natural sink of Carbon Dioxide. This is because high amounts of vegetation add to the atmospheric cooling effect that results from plants drawing carbon dioxide from the atmosphere. If the areas surrounding the Creek have certain soils, it could also be a natural sink for carbon dioxide. Constructing lighting and new paths could also cause emissions depending on the equipment and methods used.

Sequestering carbon is not one of goals outlined in the plan. If it were, I would say we have to find a way to add more vegetation then we remove while still providing better access to Copeland Creek. A possible way to do this would be replacing Himalayan Blackberry and dangerous trees with smaller and less obstructing vegetation and shape them around new trails that lead to Copeland Creek. In the meantime one must be sure to monitor the long-term health of the soil and the vegetation. Currently we have no plans to seek carbon credits for carbon sequestration activities on the site.

GRANT APPLICATION – PROPOSITION 1 SUPPLEMENTAL QUESTIONS

Provide clear, concise answer to each question below. Unless otherwise specified, please limit your answer to one concise paragraph. For question #4, limit your answer to 1-3 sentences per relevant plan. Most questions should be answered by all applicants, enter "not applicable" if a question does not pertain to your project.

1. **Proposition 1 Goals**

Protect and restore aquatic, wetland and migratory bird ecosystems including fish and wildlife corridors and the acquisition of water rights for in-stream flow.

Protect and restore coastal watersheds including but not limited to, bays, marine estuaries, and near shore ecosystems.

Reduce pollution or contamination of rivers, lakes, streams, or coastal waters, prevent and remediate mercury contamination from legacy mines, and protect or restore natural system functions that contribute to water supply, water quality, or flood management.

Assist in the recovery of endangered, threatened, or migratory species by improving watershed health, instream flows, fish passage, coastal or inland wetland restoration, or other means, such as natural community conservation plan and habitat conservation plan implementation.

2. **Conservation Corps.** For restoration and ecosystem protection projects, include a completed Corps Consultation Review Document Grantee as evidence that applicant has consulted with the state and local conservation corps and included their services if feasible.

California Conservation Corps and Certified Community Conservation Corps
Proposition 1 - Water Bond Guidelines – Chapter 6
Corps Consultation Process
June 2015
This process has been developed to ensure compliance with Division 26.7 of the Water Code, Chapter 6, Section 79734 that specifies the involvement of the CCC and the certified community conservation corps (as represented by the California Association of Local Conservation Corps-CALCC).
Section 79734 states "For restoration and ecosystem protection projects funded pursuant to this chapter, the services of the California Conservation Corps or a local conservation corps certified by the California Conservation Corps ***shall*** **be used whenever feasible**."
Applicants for funds to complete restoration and ecosystem protection projects shall consult with representatives of the California Conservation Corps (CCC) AND the California Association of Local Conservation Corps (CALCC), the entity representing the certified community conservation corps, to determine the feasibility of the Corps participation. Unless otherwise exempted (see notes below), applicants that fail to engage in such consultation should not be eligible to receive Chapter 6 funds. CCC and CALCC have developed the following consultation process for inclusion in Prop 1 – Chapter 6 project and/or grant program guidelines:
Step 1: Prior to submittal of an application or project plan to the Funder, Applicant prepares the following information for submission to both the California Conservation Corps (CCC) and CALCC (who represents the certified community conservation corps):
Project Title: Copeland Creek Restoration Plan
Project Description:
Increase public access to Copeland Creek to create an educational, recreational, and safe amenity to the community and campus in order to increase public awareness of the creek and services it provides as an intact habitat.

Project Map

Project Implementation:
Start Date 2016
End Date 2020

Step 2: Applicant submits the forgoing information via email concurrently to the CCC and CALCC representatives:

California Conservation Corps representative:
Name: CCC Prop 1 Coordinator
Email: Prop1@ccc.ca.gov
Phone: (916) 341-3100

California Association of Local Conservation Corps representative:
Name: Crystal Muhlenkamp
Email: inquiry@prop1communitycorps.org
Phone: 916-426-9170 ext. 0
Step 3: Within five (5) business days of receiving the project information, the CCC and CALCC representatives will review the submitted information, contact the applicant if necessary, and respond to the applicant with a Corps Consultation Review Document (template attached) informing them:

1. It is NOT feasible for CCC and/or certified community conservation corps services to be used on the project; or
2. It is feasible for the CCC and/or certified community conservation corps services to be used on the project and identifying the aspects of the project that can be accomplished with Corps services.

Note: While the Corps will take up to 5 days to review projects, applicants are encouraged to contact the CCC/CALCC representatives to discuss feasibility early in the project development process.

The Corps cannot guarantee a compliant review process for applicants who submit project information fewer than 5 business days before a deadline.

Step 4: Applicant submits application to Funder that includes Corps Consultation Review Document.

Step 5: Funder reviews applications. Applications that do not include documentation demonstrating that the Corps have been consulted will be deemed "noncompliant" and will not be considered for funding.

NOTES:
The Corps already have determined that it is not feasible to use their services on restoration and ecosystem protection projects that *solely* involve either planning or acquisition. Therefore, applicants seeking funds for such projects are exempt from the consultation requirement and should check the appropriate box on the Consultation Review Document.
An applicant that has been awarded funds to undertake a project where it has been determined that Corps services can be used must thereafter work with either the CCC or CALCC to develop a scope of work and enter into a contract with the appropriate Corps. Unless otherwise excused, failure to utilize a Corps on such a project will result in Funding Entities assessing a scoring penalty on the applicant's future applications for Chapter 6 Funds.

Attachment – Corps Consultation Review Document□

California Conservation Corps and Certified Community Conservation Corps
Proposition 1 - Water Bond □
Corps Consultation Review Document□June 2015

□Unless an exempted project, this Corps Consultation Review Document must be completed by California Conservation Corps and Community Conservation Corps staff and accompany applications for projects or grants seeking funds through Proposition 1, Chapter 6, Protecting Rivers, Lakes, Streams, Coastal Waters and Watersheds. Non-exempt applications that do not include this document demonstrating that the Corps have been consulted will be deemed "noncompliant" and will not be considered for funding.
1. Name of Applicant: Restoration Ecology
Project Title: Copeland Creek Restoration Plan
Department/Conservancy to which you are applying for funding**:**
To be completed by Applicant:□Is this application solely for planning or acquisition?
Yes
To be completed by Corps:□This Consultation Review Document is being prepared by:
The California Conservation Corps (CCC)
California Association of Local Conservation Corps (CALCC)

2. Applicant has submitted the required information by email to the California Conservation Corps (CCC) and California Association of Local Conservation Corps (CALCC):
Yes (applicant has submitted all necessary information to CCC and CALCC)
No (applicant has not submitted all information or did not submit information to both Corps – application is deemed non-compliant)

□3. After consulting with the project applicant, the CCC and CALCC has determined the following: □

It is NOT feasible for CCC and/or certified community conservation corps services to be used on the project (deemed compliant)
It is feasible for the CCC and/or certified community conservation corps services to be used on the project and the following aspects of the project can be accomplished with Corps services (deemed compliant).

_____
_____

□CCC AND CALCC REPRESENTATIVES WILL RETURN THIS FORM AS DOCUMENTION OF CONSULTATION BY EMAIL TO APPLICANT WITHIN FIVE (5) BUSINESS OF RECEIPT AS VERIFICATION OF CONSULTATION. APPLICANT WILL INCLUDE COPY OF THIS DOCUMENT AS PART OF THE PROJECT APPLICATION.

3. **Disadvantaged Communities.**

N/A

4. California Water Action Plan.

a. Identify which goals of the California Water Action plan the project will promote or implement.

The California Action Plan has a goal to increase flood protection that will be promoted by this project's own goal because flood protection/control falls in under the safety aspect of the project.

b. Identify the Integrated Watershed Management Plan(s) and any other regional or watershed plans that apply to the specific project area. For each, list those goals, objectives, priority actions, etc. that the project will promote or implement.

The Russian River Integrated Coastal Watershed Management Plan has a total of 6 goal and 60 objectives, the ones that this project is going to either promote or implement are:

1. Goal 1: Enhance watershed processes and improve land use

Protect and enhance important watershed processes, natural resource functional values, and socioeconomic and cultural values by maximizing land conservation, promoting best management practices (BMPs), and emphasizing low impact development.

- Restore degraded upland and riparian habitats and processes utilizing peer-reviewed stream corridor protection and watershed management methods, including but not limited to:
    1. approaches that restore or enhance functional processes
    2. invasive species removal and management
    3. sensitive species enhancement
    4. habitat enhancement and native plant revegetation.
- Reduce the negative effects of flooding via floodplain protection; protection and enhancement of riparian corridor processes and functions; and scientifically based habitat enhancement.

2. Goal 5: Develop and maintain public stewardship

Develop and maintain public understanding, stewardship, and support for natural resource processes and a healthy watershed.

- Promote community involvement in agency processes and planning, including the evaluation of agency data, management plans, and recommendations.
- Offer effective hands-on opportunities for training, input, and participation (e.g. volunteer restoration and water monitoring).

5. **Best Available Science.**

The scientific process will be used when applicable to the goals of the project. Forming clear and supporting objectives to the goals of this project was a key part of this process. During the project, hypotheses will be tested, and experiments and research will be conducted in order to test how public interest in Copeland Creek will respond to the planned changes to the creek outlined in the objectives. Polls and surveys will be used and the data collected will be analyzed and applied to the main goal of the project. The main goal is to increase public access to Copeland Creek and to create an educational, recreational, and safe amenity to the community and campus in order to increase public awareness of the creek and services it provides as an intact habitat. Objectives of the project will receive the best methods, treatments, and resources that the budget allows. For example, with the objective of reducing 80 percent of necessary underbrush, the best combination of chemical, physical, mechanical, and biological methods to apply to the removal of underbrush will be carefully considered. The highest quality technology that is affordable within the budget will be purchased and applied to give the best lighting to future constructed trails at Copeland Creek. This includes motion sensor lights.

The scientific process is also applied to our second goal, which is to enhance Copeland Creek by restoring native species, the abiotic environment, biotic communities, ecological processes, riparian zones, and upland habitats. Again using objectives, the process will be outlined, hypothesis and experiments will be formed and tested, and research will be conducted until the outline for completing this goal of the project is completed. In addition, Copeland Creek

and its ecosystem will be analyzed to see how the ecosystem responds to the addition of more native species and the removal of exotic and non native species. The best science will be used in all objectives in order to accomplish the goals of the project.

6. **New Technology.**

This project does not employ any new technologies or practices, but it does introduce the use of motion sensor lighting as a means of public safety, and to eliminate as much light pollution on the creek as possible. In addition to motion sensor lighting it will utilize practices such as manual labor, yard tools, and possibly even herbicide use, as a means to complete its goals and objectives.

7. **Sustainability.**

Part of the project goals is to create more public access to Copeland Creek. A question that should be asked during this project is how do we balance this goal while creating a natural and sustainable ecosystem at Copeland Creek? With easier public access to the creek and freedom to explore for individuals , Copeland Creek will require more security in order to protect the sustainability of certain vegetation species in the ecosystem. Important native vegetation will be fenced off in a way that doesn't disturb their life processes. Video-monitoring cameras will be placed on trees and buildings in or near the creek as well as any benches or lighting systems that are constructed. In addition, security teams could be sent out to patrol along the creek if it proves necessary. However by taking measures to allow people easier access to the creek and to enhance their education, it is hoped that Copeland Creek, in particular the segment that runs through Sonoma State, becomes seen as a sacred and peaceful area of nature that gives visual and educational enjoyment to visitors. As opposed to being seen as a shelter for different activities of activities and a place to vandalize and litter. With provided educational meeting, steps for reducing and removing pollutants will be outlined to the public, so that they can also help with the maintenance of Copeland Creek. It is also part of the plan to gain help from multiple organizations in maintaining the creek in the future.

In terms of the second goal listed in this project, adding beneficial native vegetation and reducing invasive, clogging vegetation will go a long way towards making the ecosystem, healthy, functional and thriving. Rehabilitating stream morphology, stabilizing banks, and improving flood control will also help with creating a healthy and sustainable ecosystem. Constant monitoring is also important in maintaining a sustainable and healthy ecosystem and site.

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