As part of the "Creeks in Common" initiative, this document serves as a tool to spark collaborative action by students, faculty, agencies, organizations, and campus partners. Many of the lists were generated by ChatGPT, are incomplete and contain errors, and in no way represent commitments by organizations. Working groups will use this document to jumpstart discussions and will update to reflect new priorities and partnerships. Please comment or get involved! Contact: cei.sonoma.edu.

Watershed Wide Riparian Restoration Project

A collaborative, watershed-wide riparian restoration project that brings together the many organizations, agencies, and community groups that have contributed to the health of Copeland Creek over the past decade. Building on foundational efforts—such as the long-running student-led restoration program at Sonoma State University's Center for Environmental Inquiry (CEI)—this proposed initiative would coordinate and encourage restoration activities along the full length of the creek, from the Sonoma Mountain headwaters through campus and urban areas to its confluence with the Laguna de Santa Rosa.

The project would invite partners including Sonoma Water, the City of Rohnert Park, the California Conservation Corps, the Laguna de Santa Rosa Foundation, the Youth Ecology Corps, Friends of Copeland Creek, and other local stakeholders to align their efforts, share data, and co-develop restoration priorities. Collaborative goals would include enhancing native habitat, improving water quality and bank stability, supporting climate resilience, and expanding educational and volunteer opportunities. By uniting restoration efforts across jurisdictions and sectors, this initiative aims to position Copeland Creek as a model for integrated, community-engaged riparian stewardship.

Since 2012, Sonoma Water and Sonoma State University have partnered on a ~1-mile stretch of the campus corridor to integrate flood control maintenance with ecological restoration and water quality monitoring, while providing students with hands-on field learning opportunities. From 2016 to 2022, SSU's Restoration Ecology class further advanced this work by supporting student-led restoration projects focused on native plantings, invasive species removal, and habitat design, with partial support from a Sonoma Water–CEI partnership. Earlier efforts by Friends of Copeland Creek (2000–2013) emphasized community-based stewardship along urban and campus-adjacent creek sections through cleanups, invasive species removal, and environmental education, driven primarily by volunteers and local partnerships.

Between 2013 and 2015, the Sonoma Resource Conservation District (RCD) led a restoration of approximately 6,000 feet of streambank along the Copeland Creek alluvial fan, aiming to reduce erosion, protect riparian zones from cattle, and enhance habitat for native fish species—funded



by Sonoma Water through a watershed enhancement grant. A separate RCD project (2011–2017) focused on 1,600 feet of lower Copeland Creek, planting around 900 native trees and shrubs to stabilize banks and reduce sediment and nutrient loading. Finally, from 1999 to 2003, Sonoma Water's Copeland Creek Restoration Project established a 100-foot riparian buffer along an unspecified reach of the creek to improve aquatic habitat, lower water temperatures, stabilize channels, and reduce sedimentation.

Partial List of Existing Efforts in the Watershed

- **SSU Center for Environmental Inquiry (CEI)** leads the riparian restoration initiative, coordinating fieldwork, curriculum integration, and long-term ecological monitoring. The project engages students directly in hands-on restoration and fosters interdisciplinary learning that supports both science and community resilience.
- Sonoma Water is responsible for maintaining portions of Copeland Creek as part of its regional flood control and stormwater management system. Within its jurisdiction, Sonoma Water conducts vegetation management, sediment removal, and infrastructure maintenance to reduce flood risk and ensure hydraulic function. The agency also supports environmental restoration and education initiatives—such as its multi-year partnership with Sonoma State University's Center for Environmental Inquiry—recognizing that healthy riparian corridors contribute to long-term watershed resilience, water quality, and community safety.
- SSU Students and Faculty from a wide range of departments—particularly
 Environmental Studies, Biology, Geography, and Education—participate in restoration,
 monitoring, and service-learning. Faculty help integrate the project into coursework and
 research activities.
- Laguna de Santa Rosa Foundation has collaborated on riparian restoration projects within the Copeland Creek watershed, focusing on enhancing biodiversity and ecological function in the region.
- California Conservation Corps (CCC) has contributed labor and expertise to restoration projects, assisting with invasive species removal, native plant installation, and erosion control measures along Copeland Creek.
- **Sonoma County Youth Ecology Corps** has engaged local youth in hands-on environmental projects, including riparian restoration efforts along Copeland Creek, providing job training and fostering environmental stewardship.
- City of Rohnert Park has been involved in restoration and maintenance activities along portions of Copeland Creek within its jurisdiction, collaborating with agencies like Sonoma Water to balance flood control with ecological enhancement.



Partial List of Potential Additional Organizations

- **Point Blue Conservation Science** could assist with habitat monitoring, bird surveys, or restoration planning using climate-smart principles.
- **Sonoma Ecology Center** brings expertise in creek restoration, native plant propagation, and watershed-scale education—ideal for collaboration or training.
- **Daily Acts** is known for community resilience and ecological landscaping; could support community-based stewardship events or interpretive installations.
- California Native Plant Society (Milo Baker Chapter) could assist with native species selection, planting days, and educational outreach about riparian flora.
- Friends of the Petaluma River / Russian Riverkeeper may offer guidance or resources to help scale up regional riparian efforts.
- California Department of Fish and Wildlife (CDFW) may assist with habitat assessments or permitting; supportive of steelhead recovery and riparian corridor health.
- California Conservation Corps (CCC) could provide youth crews for planting, erosion control, and trail maintenance —supporting workforce development and project scale-up.
- **Sonoma County Regional Parks** might support downstream habitat connectivity or help expand restoration into park-adjacent corridors.
- U.S. Fish and Wildlife Service Partners for Fish and Wildlife Program offers technical and financial support for riparian and aquatic habitat restoration, especially benefiting listed species.
- **Federated Indians of Graton Rancheria (FIGR)** may wish to collaborate on native plant stewardship, TEK-informed land care practices, and cultural education components.
- California Indian Environmental Alliance (CIEA) could support training or collaboration on watershed restoration that respects cultural values and Indigenous-led stewardship.
- University of California Cooperative Extension (UCCE Sonoma County) offers technical support for riparian vegetation management, invasive species control, and water quality monitoring.
- Santa Rosa Junior College (SRJC) could collaborate through environmental science or natural resources courses, creating a pathway for student engagement and learning.
- LandPaths brings experience in outdoor education and restoration-based youth programs; ideal for community field days or family programming.
- Sonoma County Office of Education (SCOE) may help connect K–12 students and teachers to the site for field experiences or service-learning.
- **Community Soil Foundation** focuses on soil health and ecological literacy, which aligns well with riparian function and restoration education.



• **Sonoma County Department of Health Services** could support nature-based wellness, community engagement, or public access elements of the project.

Partial List of Potential Academic Engagement This list provides examples of how various disciplines might engage with the initiative. It is intended to prompt faculty to consider how their own interests and expertise may align.

- Geography, Environment, & Planning (GEP): could riparian land use planning, habitat restoration design, watershed mapping, interagency coordination, climate resilience planning
- **Biology:** could study native plant and wildlife restoration, ecological monitoring, species diversity, habitat connectivity, stream ecology
- **Geology:** could study streambank stability, erosion control, sediment transport, soil composition, watershed hydrology
- **Education:** environmental literacy, outdoor learning programs, community-based education, student-led research and service learning
- **Native American Studies:** Indigenous stewardship practices, cultural landscape restoration, tribal consultation, traditional ecological knowledge
- **Sociology:** community collaboration, environmental justice, volunteer engagement, social impacts of green infrastructure
- Political Science / Public Administration: policy alignment, multi-jurisdictional governance, public agency coordination, civic participation
- **Business:** nonprofit and agency partnerships, funding strategy, stakeholder management, environmental entrepreneurship
- **Economics:** ecosystem services valuation, cost-benefit analysis of restoration, regional economic impacts, resource allocation
- **Engineering Science:** erosion control structures, stormwater management, restoration engineering, infrastructure integration
- Mathematics & Statistics: environmental data analysis, restoration outcome modeling, longitudinal impact studies, spatial statistics
- Art & Art History: visual interpretation of restoration progress, public signage and exhibits, community art in restoration spaces
- **Communication & Media Studies:** outreach strategy, public awareness campaigns, digital storytelling, media relations
- **Psychology:** environmental psychology, community connection to place, mental health benefits of nature engagement, pro-environmental behavior

Partial List of Potential Funders



This project is well-positioned to attract funding from a wide range of sources given its strong ties to student engagement, habitat restoration, watershed health, climate resilience, and community involvement.

- California Department of Fish and Wildlife Watershed Restoration Grants (Prop 1 & Prop 68) supports riparian and aquatic habitat restoration, especially for salmonid recovery (e.g., steelhead trout).
- California State Coastal Conservancy Climate Resilience or Urban Greening Programs provides funding for habitat restoration projects that also increase climate resilience and public access.
- California Wildlife Conservation Board (WCB) Riparian Habitat Conservation Program funds restoration and enhancement of riparian corridors statewide, especially where native vegetation and connectivity are restored.
- California Natural Resources Agency Environmental Enhancement and Mitigation
 (EEM) Program supports restoration efforts that mitigate the environmental impact of
 transportation infrastructure near creeks and trails.
- California State Water Resources Control Board Nonpoint Source (NPS)
 Implementation Grants could fund erosion control, native planting, or other BMPs (best management practices) along the creek corridor.
- USDA Natural Resources Conservation Service (NRCS) Environmental Quality
 Incentives Program (EQIP) supports restoration and conservation practices on public or
 educational lands, including invasive species removal and riparian buffer planting.
- U.S. Fish and Wildlife Service Partners for Fish and Wildlife Program offers technical and financial support for voluntary habitat restoration projects, especially in priority watersheds.
- Rose Foundation for Communities and the Environment prioritizes community-based watershed restoration, environmental justice, and youth engagement.
- **Strong Foundation for Environmental Values** is Sonoma County-based and supports environmental stewardship and educational opportunities for young people.
- Community Foundation Sonoma County offers environment-focused and youth-centered grants that could fund student participation, signage, or community restoration days.
- The Watershed Project (via larger regional grants) while based in the Bay Area, they sometimes subgrant for community-based habitat restoration and education.
- Outdoor Classroom Project / Children & Nature Network could support education infrastructure or interpretation related to riparian ecology.
- **Tides Foundation / Patagonia Environmental Grants** support grassroots environmental projects, particularly those involving hands-on restoration and youth leadership.



- Sonoma Clean Power EverGreen Education and Resilience Programs could support climate-smart land management or student-driven ecological research.
- **REI Foundation or Patagonia** often fund trail-adjacent habitat restoration and outdoor education that promotes stewardship and climate resilience
- Local businesses (nurseries, landscape suppliers) may provide in-kind donations of native plants, tools, or mulch for volunteer planting days.

