**WATERS Collaborative**

Watershed Academics to Enhance Regional Sustainability

Sonoma State University / Sonoma County Water Agency



**2013-14 WATERS Accomplishments**

**Participating Students and Faculty**

* 286 students participated in 21 WATERS projects with 12 faculty. Participants included students in 14 courses, 9 departments, and 3 schools. Students engaged in service-learning, independent research, senior capstone projects and student assistantships.
* WATERS supported two events that engaged approximately 250 students, faculty, staff and community members:
  + 2014 SSU Science Symposium - WATERS collaborated with the School of Science & Technology to host the 2nd annual science symposium which celebrated the achievements of SSU students engaged in scientific research. Over 200 attendees talked to students about their research projects. WATERS presentations included 15 student posters, 2 freshmen oral presentations, and 3 program posters.
  + Marin Carbon Project – WATERS provided contact for a speaker from the Marin Carbon Project to Environmental Studies and Planning Energy Forum.

**Partnerships**

* Staff from 12 organizations worked with faculty and students on WATERS projects: City of Santa Rosa, City of Rohnert Park, Sonoma County Youth Ecology Corps, Occidental Arts and Ecology Center, Gold Ridge Resource Conservation District, SSU Preserves, SSU Garden Classroom, SSU Facilities, SSU Sustainability Executive Committee, Pepperwood Preserve, Marin Carbon Project, Sonoma County Youth Ecology Corps

**Fundraising and Grants**

* WATERS worked with partners to find an additional $63,834 in project matching funds:
  + $45,000 in matching funds were provided for WATERS projects by:
    - IRA Instructionally-Related Activity Funding (Farahmand/Luke) - $14,000
    - CSU Campus as a Living Lab (Farahmand) - $10,000
    - Steven Norwick Memorial Fund - $4,000
    - Daphne Smith - $5,000
    - School of Science and Technology - $1,500
    - NSF Grant "Stepping Up Stem“ (PI: Lynn Stauffer) - $3,000
    - SSU Preserves - $4,500
  + PG&E donated $15,834 in high-density lidar on 400 acres in the headwaters of Copeland Creek. The data are unparalleled in detail, providing lidar at 40 pts per square meter (recent county lidar coverage is at 8 pts per square meter), and creating an important resource for research on erosional processes and vegetation analysis. Data covers the 411 acres of the Fairfield Osborn Preserve and was flown on April 2013.
  + Initiated in 2013, the "Sustainability in the Classroom" program provided $6,000, with 50% from the Sustainability Executive Committee (GMC Academic Integration Funding – PI Paul Draper) and 50% from WATERS, to support faculty interested in incorporating sustainability service-learning projects into course curricula. In 2013-14, WATERS supported the development of 3 water-related research projects for courses slated to be taught during the 2014/15 school year:
    - ENSP 450 Sustainable Water Technology and Toxicology – Jackie Guilford
    - Math 470 Mathematical and Statistical Modeling – Martha Shott and Ben Ford
    - PHIL 301 Philosophy of Science and Technology – John Sullins
* WATERS supported 2 grant applications:
  + Environmental Protection Agency (EPA) Pollution Prevention Grant Program – The WATERS Coordinator along with the Director of Sustainability, assisted in the coordination and submittal of a 2 year $160,000 EPA grant that creates an academic-winegrower partnership to reduce pollution in Sonoma County. Faculty in the School of Business are partnering with Marin-based nonprofit Strategic Energy Innovations and County Winegrowers to create case studies highlighting the success of vineyards already certified as sustainable. The information will be used by Sonoma County Winegrowers to achieve their sustainability goal of establishing 100% of winegrowers in the county in the next 5-years.
  + NSF Improving Undergraduate STEM Education Application - Santa Rosa Junior College and Pepperwood Preserve submitted an NSF proposal to teach students about climate-ready communities: *Climate Smart Sonoma*: building community resilience though expansion of Science, Technology, Engineering and Mathematics (STEM) career pathways at Santa Rosa Junior College. The WATERS Coordinator will support the project by working with project staff to install and maintain a climate monitoring station in the upper watershed, developing project opportunities on watershed issues, and serving on the external review committee.

**Projects in Development**

* Copeland Creek Riparian Restoration Project – We have begun working with Laguna Foundation (John Guardino) and SSU Facilities (Craig Dawson) to develop proposals to restore the riparian understory on the campus section of Copeland Creek.