



Water Collaboration Opportunities with Sonoma State University

Claudia Luke, Director



“At this moment in time, we are called to lead and act with courage. We are called to embrace change. Change in our societies. Change in the management of our economies. Change in our relationship with our one and only planet.”

United Nations 2014, p. 3





SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING

4 QUALITY EDUCATION

5 GENDER EQUALITY

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

17 PARTNERSHIPS FOR THE GOALS

SUSTAINABLE DEVELOPMENT GOALS

A person in a dark grey suit and tie is shown from the chest down, holding several white puzzle pieces. The puzzle pieces are arranged in a descending staircase pattern from the top left towards the bottom right. The background consists of a bright blue sky with scattered white clouds and a green field at the bottom. The text "What is my role in creating transformational change?" is overlaid on the right side of the image.

What is my role in creating transformational change?

Role of Higher Ed

- ▶ Graduates
- ▶ New Knowledge
- ▶ Communication
- ▶ Operations



Transformational Goal

An Environmentally Ready Society

...one where everyone has the skills to find solutions to challenges facing the North Bay.



Role of Higher Ed

Graduates in all disciplines:

Understand human-environment interactions

Are excellent communicators, problem-solvers, and collaborators



Environmentally Ready Graduates?

Understanding?



63 hrs/wk

digital media use
by 12-18 year
olds

Communicators?



58%

executives who
can't find
communicators

All Sectors?



few

degrees requiring
an environmental
component

Knowledge?



86%

US population
environmentally
illiterate

Center for Environmental Inquiry

Education for a changing planet:

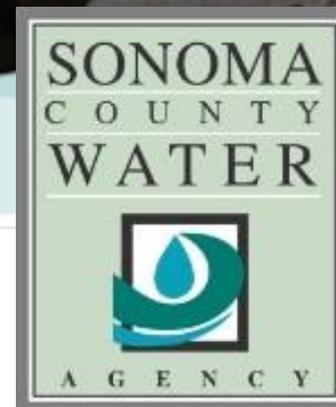
- ▶ First-hand understanding of our connection with the environment
- ▶ Skill-building experiences
- ▶ Innovative solutions



The WATERS Collaborative

A collaboration of Sonoma Water and the SSU Center for Environmental Inquiry

www.sonoma.edu/waters



WATERS Accomplishments

- ▶ 229 projects
- ▶ 2,691 students (118 courses)
- ▶ 20+ partners/yr
- ▶ 30 faculty/yr; 15+ deparths/yr
- ▶ Internships & jobs



Topics

- ▶ Sediment and Erosion
- ▶ Restoration
- ▶ Water Quality
- ▶ Availability and Use
- ▶ Communication
- ▶ Land Use Planning



Disciplines

- ▶ Science & Technology
- ▶ Land Use Planning
- ▶ Communication
- ▶ Business
- ▶ Philosophy
- ▶ Political Science
- ▶ History



Flood

Challenge

Flooding Lichau Road access

Project

Flood modeling of Copeland Creek

Results

Sonoma Water flood control design



Invasive Aquatics

Challenge

Ludwigia invasion in the Laguna

Project

Plant response to channel design

Results

Channel design for invasive species control



Land Use Planning

Challenge

Water integration in land use planning

Project

General Plan assessments

Results

Issues, goals, policies, actions, success indicators



Transformative Impact

“ I am walking away with valuable skills: teamwork, leadership, communication, and creativity. ”

Nicole Manzares

Sustainable SSU

- ▶ Presidents' Climate Leadership Commitment – April 5, 2019
- ▶ President's Sustainability Advisory Council - Oct 25, 2019
- ▶ Climate Action Plan – April 5, 2020



Renewed Commitment

- ▶ Build on success of WATERS and other programs
- ▶ Focus on viable solutions and real impact
- ▶ Engage faculty and students across all disciplines
- ▶ Enhance public awareness of the complexity of issues.



Rising Waters Initiative

- ▶ Complex high-priority issues surrounding water
- ▶ Neutral meeting ground for diverse partners
- ▶ Cross-disciplinary engagement to address cultural, economic and environmental issues
- ▶ Facilitated process targeting innovative and practical solutions



Rising Waters Process

- ▶ Rising Waters Working Group identifies issue(s)
- ▶ Multi-disciplinary faculty-student teams collect and summarize data
- ▶ Collaborative brainstorm for solutions and cost-benefit analysis by teams
- ▶ Presentations and reports



Yr 1: Homelessness in Watersheds

- ▶ flood protection
- ▶ water quality
- ▶ sanitation/health
- ▶ habitat conservation



Yr 1: Homelessness in Watersheds

- ▶ recreation
- ▶ human right to water
- ▶ economic impacts



Benefits to Partners

- ▶ Viable solutions on emerging complex issues
- ▶ New partnerships and facilitated cross-disciplinary discussions
- ▶ Enhanced public awareness on complex issues
- ▶ Trained workforce



Regional Board Opportunity

- ▶ What shall we accomplish together?





An Environmentally Ready Society

