Sustaining Plains Aquatic Ecosystems through Ecological and Social Research

1. Faculty Mentors

- (1) Jonathan Salerno, Asst. Prof., Dept. Human Dimensions of Natural Resources, Warner College. Email: jonathan.salerno@colostate.edu
- (2) Yoichiro Kanno, Asst. Prof., Dept. Fish, Wildlife, and Conservation Biology, Warner College. Email: yoichiro.kanno@colostate.edu

2. Other Mentors

- (1) John Sanderson, Director, Center for Collaborative Conservation, Warner College.
- (2) Joel Schneekloth, Water Resources Specialist, U.S. Central Great Plains Research Station, CSU Water Center and Extension.
- (3) Wilma Trujillo, Area Agronomist, Logan and Morgan Counties, CSU Extension.

3. Study Region

South Platte River Basin and Republican River Basin. Study will take place on the CSU main campus in Fort Collins, with trips to the study region to engage with stakeholders.

4. Internship Goals, Scope, and Objectives

The internship goal is to assist with solving water management and aquatic sustainability issues in northeastern Colorado through applied ecological and social research. The intern will participate in a laboratory ecological experiment on the CSU main campus to study interactions and competition between native plains fish and non-native mosquitofish, and a social survey to assess water managers' and landowners' perceptions regarding aquatic ecosystems and factors affecting attitudes towards environment-relevant water use practices in South Platte and Republican Basins.

5. Project background

Water is a valuable resource in Colorado. Limited supply and competing demands for use require careful planning and inter-disciplinary understanding of issues surrounding water. Our applied research aims to inform water management in the study region and is funded mainly by the Colorado Water Conservation Board and South Platte Basin Roundtable.

6. Stakeholder groups the intern will work with

Ecological research: Colorado Parks and Wildlife (fisheries biologists)
Social research: South Platte Basin Roundtable (water managers and users)

7. Student Learning Outcomes and Opportunities for Professional Development

The intern will learn complexities of aquatic sustainability issues in the arid West through hands-on experience and inter-disciplinary methods in applied ecology and human dimensions research. The intern will work closely with and is also mentored by a graduate student in Warner College. The intern is expected to develop a poster focusing on an ecological and/or social aspect of the summer experience and present it at CSU Extension's Annual Forum and other opportunities (e.g., CO-WY American Fisheries Society meeting).

8. Mentor Style

The intern should be truly interested in inter-disciplinary research integrating ecology and human dimensions. The intern is expected to be a good team member and communicator, while also performing some tasks independently.

9. Availability of travel funds

Travel funds are available for field data collection and stakeholder engagement.