



## **IF YOU BUILD IT, THEY WILL COME: RAPID COLONIZATION BY AQUATIC SPECIES FOLLOWING FLOW RESTORATION IN THE SANTA CRUZ RIVER**

**SPEAKER:** Michael Bogan, UArizona SNRE

**DATE:** Wednesday, February 7th

**TIME:** 3:00 - 4:00 pm

**LOCATION:** ENR2 S210 & [Zoom](#)

### **ABSTRACT:**

Many rivers in the Southwest have been dewatered due to dams, diversions, and excessive groundwater pumping. After supporting wildlife, agriculture, and human communities for more than 4000 years, the Santa Cruz River was dewatered in the early 1900's as the city of Tucson grew. However, flow has been re-established in several reaches via the discharge of effluent (treated wastewater). In 2019, flow was restored to the river in downtown Tucson as part of the Santa Cruz River Heritage Project. Since then, we have tracked aquatic community development in this reborn river system, monitoring when and how species recolonize the river and how they respond to management actions, including channel dredging. Some types of animals, such as dragonflies and amphibians, colonized the reach within days of flow resuming, while others took >6 months to arrive, and some have not returned at all. We also have taken the initiative to reintroduce some dispersal-limited species, including Gila topminnow and longfin dace. Despite the modern-day Santa Cruz River being an anthropogenic ecosystem, it still supports hundreds of aquatic and riparian species in our city's urban core, demonstrating the enormous value of effluent in creating habitat and maintaining biodiversity.

