

Presentation #5 - Nevada Wetland Program Development – Inventory, Mapping and Data Management Tools, and Partner Engagement

Wednesday, November 18, 2020 – 9:45 a.m.-10:15 a.m. PST

PRESENTERS

- Kristin Szabo, Administrator, Nevada Division of Natural Heritage
- Ken McGwire, PhD, Associate Research Professor, Desert Research Institute
- Jeff Jenness, GIS Analyst, Museum of Northern Arizona, Springs Stewardship Institute

ABSTRACT

The Nevada Division of Natural Heritage is leading a collaborative team to continue wetland program development through four primary tasks: 1) Compiling existing data and collecting new data on Nevada springs and springs-dependent species ecology and distribution, 2) Improving [Springs Online](#) and springs-dependent species documentation; 3) Conducting outreach through webinars, symposia, and on-the-ground training, and 4) Defining Sub-units within Nevada Priority Wetlands and Integrating Species Data into Level 1 Analyses. The two-year project will result in new knowledge of springs and springs-dependent species in the state; enhanced springs information communicated through online services, workshops, webinars, and training sessions; increased functionality of the Level 1 wetland analysis tool to create a more consistent and meaningful framework for regional or statewide analysis and prioritization; and increased stakeholder and partner engagement.

BIOS



Kristin Szabo joined the Nevada Division of Natural Heritage in 2009 as a Biologist, specifically hired to conduct species climate change vulnerability assessments to inform the Nevada Wildlife Action Plan revision. She continued working as a Biologist for six years maintaining rare species data in the state, and she was appointed Administrator of the agency in 2015. As Administrator, Ms. Szabo manages a staff of seven, an approximately \$1.5M budget, and several rare species, wetland, and climate change-related grants and contracts. Ms. Szabo has a B.S. in Biology from California State University, Long Beach, and a minor in Chemistry. She began her professional career as a consulting biologist working for a private environmental firm in Irvine, California. Over her 10-year consulting tenure, she climbed the ranks to Senior Biologist and Project Manager, managing large, complex, multi-disciplinary projects throughout southern California.



Dr. Ken McGwire is an Associate Research Professor at the Desert Research Institute in Reno, Nevada. He has been Principal Investigator for research grants from NASA, NSF, DOE, EPA, USDA, BLM, and state-level agencies. He was a member of the science team for the hyperspectral Hyperion sensor on NASA's Earth-Observing 1 satellite and has participated in national and international committees and workshops coordinated through groups such as the China National Space Agency and the Argentine space agency (CONAE). He has published 55 peer-reviewed research papers and book chapters and has a patent for hyperspectral mapping. Dr. McGwire's most recent work includes mapping and analysis of riparian and

wetland habitats, modeling of rangeland erosion and salinity, and monitoring methods for dust pollution abatement.



Jeff Jenness is an Adjunct Professor of GIS at the School of Forestry at Northern Arizona University, GIS Analyst for the Springs Stewardship Institute, Chair of the Spatial Ecology and Telemetry Working Group of The Wildlife Society, and an independent consultant specializing in developing analytical applications for a wide variety of topics, although he most enjoys ecological and wildlife-related projects. He spent 16 years as a wildlife biologist with the USFS Rocky Mountain Research Station in Flagstaff, Arizona, mostly working on Mexican spotted owl research. Since starting his consulting business in 2000, he has worked with universities, businesses,

and governmental agencies around the world, including a long-term contract with the Food and Agriculture Organization of the United Nations (FAO) for which he relocated to Rome, Italy for 3 months. His free ArcView and ArcGIS tools have been downloaded over 200,000 times.