

“Future of agricultural water use”: Speaker bios, background

The 2013-14 Water Policy Interim Committee included a discussion of the “future of agricultural water use” as part of their biennial work plan. According to the work plan:

The WPIC and its staff will host a panel discussion on this topic, including a discussion of the effects of key stresses, future supply and demand, climate variability, research priorities, and the resiliency of the agricultural water use system.”

To answer these questions, staff has recruited four individuals to discuss each aspect.

Climate variability, research priorities

Kelsey Jencso is an assistant professor and watershed hydrologist in the University of Montana’s College of Forestry and Management. He is also the state climatologist and leads the Montana Climate Office in Missoula. Jencso received a doctorate degree from Montana State University. The office is the official steward of climate information in Montana and is conducting research related to the distribution of “greenness,” snow cover, and other topics.

Key stresses

Paul Stoy is an assistant professor in Montana State University’s Department of Land Resources and Environmental Sciences. He has investigated trends in wind speed, precipitation, drought, evapotranspiration, and aridity in Montana over the past 60 years. Stoy received a doctorate degree from Duke. His specific interests include quantifying the impacts of land use change and climate change on the surface energy balance, the carbon cycle, and hydrology in temperate, boreal, and arctic ecosystems.

Future supply

Tim Davis has served as administrator of the Department of Natural Resources and Conservation’s Water Resources Division since 2010. Division staff is updating the Montana State Water Plan, which must contain “an estimate of the amount of surface and ground water needed to satisfy new future demands.”

Resiliency of system

Marco Maneta is an assistant professor in the University of Montana’s Department of Geosciences. He has conducted research into how farmers react to various external factors, such as climate variability such as drought, changes in water policy and rules, changes in market prices, or the availability of labor. He plans to expand this research to Montana. A native of Spain, Maneta received his doctorate’s degree from the University of Extremadura, Spain, which was co-promoted by faculty at the University of Utrecht, Netherlands.