



Registration:



Symposium: Our Karst Landscape and Water Quality

June 4, 2024

Blue Ridge Community College

Karst experts from the U.S. Geological Survey, Virginia Department of Environmental Quality, and Virginia Department of Conservation and Recreation provide an overview of the unique hydrogeology of our karst landscape as it applies to policy and practice in conservation and in planning and development.

Agenda

8:30-9:00 **Registration, breakfast snacks, coffee**
9:00-9:15 **Welcome and Opening Remarks**
Chris Runion Delegate, 25th District, Virginia General Assembly

Anatomy of a Karst Landscape

9:15-10:00 **What is Karst?**
Dan Doctor An introduction to the karst geology of the Appalachian Great Valley region: the formation of its geologic structure and basic hydrologic development of its modern karst aquifers

10:00-10:45 **How does Karst work?**
Joel Maynard An overview of groundwater processes in western Virginia with emphasis on groundwater movement through the karst aquifer systems, including precipitation and recharge, characteristics of local springs, surface water-groundwater interaction, and karst well characteristics

10:45-11:00 BREAK

11:00-11:45 **Karst and Groundwater Quality**
Mark Kozar An overview of more than 60 years of USGS groundwater research in the northern Shenandoah Valley, including groundwater quality studies and new understandings of groundwater flow

11:45-12:45 **Lunch and Networking**

Preserving and Planning in a Karst Landscape

12:45-1:30 **Why Does Karst Matter?**
Jimmy Webber Insights from years of water-quality monitoring in the Smith Creek Watershed, including the sources and transport of nitrogen in the Creek and the important implications for preserving and improving water-quality

Wil Orndorff An overview of invaluable karst ecosystem services that provide habitat to numerous globally rare subterranean species and the base flow for healthy surface waters across western Virginia and how appropriate stormwater management practices allow humans to reduce their impact on these ecosystem services

1:30-1:45 BREAK

1:45-2:45 **How can conservation, planning, and policy practitioners work effectively within the karst landscape?**
Panel A panel of our presenters and conservation, government, and industry practitioners explore the implications of karst on decision making and project planning.

Discussion

2:45-3:00 **Next Steps and Closing Remarks**