[Click here to view the 2017 lecture tour schedule]

Ed Harvey is supervisory hydrologist and chief of the U.S National Park Service (NPS) Water Resources Division (WRD) located in Fort Collins, Colorado. He received his B.S. in geology/geophysics from Olivet Nazarene University (1986), his M.S. in hydrogeochemistry from Purdue University (1990) and his Ph.D from the University of Waterloo in Waterloo, Ontario, Canada (1996). Immediately after graduation, Ed took a joint position at the University of Nebraska-Lincoln (UNL) where he was a research hydrogeologist with the Conservation and Survey Division (the state's geologic and water survey) and a professor of hydrologic sciences with the School of Natural Resources (SNR). At UNL, Ed's research focused on groundwater dependent ecosystems, groundwater-surface water interaction, and using geochemical and isotope applications methods to characterize regional groundwater flow systems. More about Ed and a list of his publications can be found at https:/www.nps.gov/orgs/1439/forrest-ed-harvey.htm.

In January, 2013, Ed left his academic position to assume his current role as NPS WRD chief. WRD provides Park Service-wide leadership for the preservation, protection, and management of the water and aquatic resources, offers technical assistance to all 400+ national park units, leads and supports development of NPS water resource initiatives, guidelines, and policies and provides disciplinary and policy support to the Washington, DC offices and Park Service leadership staff. More information about WRD can be found at https://www.nps.gov/orgs/1439/index.htm.

Ed has served the broader geological and hydrogeological community in various capacities. He is Fellow of the Geological Society of America (GSA), is presently a GSA Councilor, and served as the GSA Books Editor from 2011-2014. Ed chaired the GSA Hydrogeology Division from 2010-2011, having previously served as vice chair, newsletter editor, website administrator and technical program chair for the 2009 meeting in Portland. In 2008, Ed received the GSA Hydrogeology Division's George Burke Maxey Distinguished Service Award. Ed has also been an associate editor for Ground Water and Hydrogeology journals.

Interested institutions can schedule a visit by contacting Ed Harvey at forrest_harvey@nps.gov. Or, you can complete a request form here. If emailing, please provide your institution name, a contact person's email and phone, and potential dates for when you would like to host the lecture. Ed will present one lecture on the topic of National Park water resources described

below. GSA's Hydrogeology Division is particularly interested in including liberal arts colleges in the itinerary. The Division pays transportation expenses, and the host institution is expected to provide local accommodations.

Abstract of Lecture: Water Resource Stewardship in the U.S. National Park Service

On August 25, 1916, President Woodrow Wilson signed the act creating the National Park Service, a new bureau in the Department of the Interior. This "Organic Act" directed the Park Service "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." This conservation, enjoyment and protection mandate also applies to water resources within parks.

Unlike most park resources, that are located largely within park boundaries, or are completely under the management control of the National Park Service, park water resource issues and management often involve greater challenges. These challenges arise from the fact that surface water and aquifer boundaries often extend beyond park boundaries and because the legal authority to allocate and manage water resources typically resides with the states. Thus, parks often need to consider resource issues at a larger landscape, or seascape scale, and manage collaboratively with neighbors and partners to protect, manage and restore water resources. In addition, water resource expertise is not always available within a park, resulting in the need to partner with other agencies, universities, friends groups, or regional and national offices. Lastly, many park water resource issues have broader legal, political, socioeconomic, and cultural implications requiring park managers to consider more than just the science alone when making a water resource management decision.

The lecture, using a series of examples from various parks across the United States, will explore the process of how parks identify water resource needs, issues and concerns, and how they develop and apply the necessary scientific information needed to make water resource management decisions. Specific challenges to decision making and park water resource management will be presented and explored including trans-boundary issues, partnership building, scientific uncertainty, funding and personnel/expertise, and making science-based decisions that also appropriately consider the legal, political, socioeconomic, and cultural impacts of the decision. As part of the visit, the lecturer will also present future water resource research and management needs in parks and across the nation, present information about engaging in water resources research within parks, and advise students on programs for seasonal and permanent employment as a water resource professional within the National Park Service.