National Park Service springs monitoring protocols – Mojave Desert Inventorying and Monitoring Program

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The Mojave Desert Network Inventory and Monitoring Program (MOJN I&M) is one of 32 ecoregional networks established by the National Park Service to monitor the status and trends of natural resources, including springs. MOJN I&M currently monitors springs at five park units throughout the Mojave Desert, including Death Valley National Park, Joshua Tree National Park, Mojave National Preserve, Lake Mead National Recreation Area, and Grand Canyon-Parashant National Monument. We implement three spring monitoring protocols across these park units: (1) The Desert Springs protocol monitors a rotating panel of 233 smaller springs and focuses on the availability and seasonality of surface water at these springs, as well as water quality where surface water is present. (2) The Selected Large Springs protocol monitors 12 larger springs chosen by park resource managers for their hydrological and ecological importance. These springs are more frequently and intensively monitored for continuous discharge, water quality, and benthic macroinvertebrates. (3) The Spring Vegetation protocol monitors 18 springs chosen by park resource managers. These springs are intensively monitored at the species level for changes in plant community composition, distribution, and abundance. This presentation will include an overview of our three spring monitoring protocols, including a discussion of field methods and preliminary data.