INTEROP: Developing community-based drought information network protocols and tools for multidisciplinary regional scale applications (DRInet)

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Project Objectives. We propose to develop a regional web portal, DRInet, and deploy it as a pilot that will become a focal point for collecting and disseminating local to regional scale drought information (data and commentary) in a systematic, retrievable way. The disseminated information via the DRInet will be based on a comprehensive evaluation of causal factors for short and long term droughts, as well as on a standardization of data formats and collection practices. We thus lay the foundation for investigating and providing improved drought risk and trigger indicators. By engaging the diverse communities of stakeholders in a series of seminars and implementation of tools and dissemination vehicles, we lay the foundation for linkages between causal factors of droughts and their impacts and enable interoperability of heterogeneous information in novel ways.

Approach and Benefits: We will engage diverse stakeholders for drought information and build community acceptance of the local and regional data collection, compilation and data formats, guided by an advisory committee of leading experts and policy makers. To-date, many gaps hamper efforts at forecasting droughts and mitigating their impact. Our work will foster increased communication and cross-synthesis of data for diverse applications. Consequently, we will be able to provide a solid basis for drought assessment. Further, we will use the web portal as an educational tool, and draw on visualization capabilities to better explain, for example, the role of precipitation and stream flow patterns on droughts.

Project Website: http://drinet.hubzero.org/