World Water Online (WWO) Status and Prospects

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Water resources, weather, and natural disasters are not constrained by local, regional or national boundaries. Effective research, planning, and response to major events call for improved coordination and data sharing among many organizations, which requires improved interoperability among the organizations' diverse information systems. Just for the historical time series records of surface freshwater resources data compiled by U.S. national agencies, there are over 23 million distributed datasets available today. Cataloguing and searching efficiently for specific content from this many datasets presents a challenge to current standards and practices for digital geospatial catalogues.

This presentation summarizes a new global platform for water resource information discovery and sharing, that provides coordinated, interactive access to water resource metadata for the complete holdings of the Global Runoff Data Centre, the U.S. Geological Survey, and other primary sources. In cases where the data holdings are not restricted by national policy, this interface enables direct access to the water resource data, hydrographs, and other derived products. This capability represents a framework in which any number of other services can be integrated in user-accessible workflows, such as to perform watershed delineation from any point on the stream network.

World Water Online web services for mapping and metadata have been registered with GEOSS. In addition to summarizing the architecture and capabilities of World Water Online, future plans for integration with GEOSS and EarthCube will be presented.