Does hydrology have a soul? (Henry Darcy Medal Lecture)

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Water is the distinguishing feature of Earth. Its presence sustains life, business, energy and romance. Hydrology is the science of water. Hence, it is one of the most relevant and exciting of the planetary sciences. But, does hydrology as it is taught and practiced today achieve this potential? Is understanding and predicting the hydrological cycle really in the domain of today’s hydrologists? I intend to present a personal view of some puzzles as well as fundamental issues that define hydrology as a fertile ground of scientific inquiry that emerges at the intersection of the planetary and life sciences, and of course human behavior. I plan to outline 5 main questions whose explicit or implicit pursuit characterizes the essence of the hydrological being.