



Réseau
québécois
sur les eaux
souterraines



Groupe de
recherche
interuniversitaire
sur les eaux
souterraines



SÉRIE DE CONFÉRENCES EN HYDROGÉOLOGIE

Conférence du 5 novembre 2014

Conférencier : Todd Jarvis

Institute for Water & Watersheds, Oregon State University

«Contesting Hidden Waters: Hydrofracking and the Hydrohydra »

Abstract

Hydrofracking is part of the “hydrohydra” —a many-headed beast—of myths, paradoxes and misunderstandings of the tenets within hydrogeology that ultimately leads to a lack of trust by decision makers. “Hydra” is a term applied to the complex situations or problems that continually pose compounding difficulties in groundwater governance.

The rapid expansion of installing directionally drilled boreholes in regionally extensive shales and low permeability (“tight”) sandstones, followed by staged stimulation through high pressure injection of fluids in order to induce fracturing, or “fracking” to recover natural gas, is a media darling that is currently fueling public angst and concern, primarily about water supplies and groundwater pollution. The debate among groundwater professionals extends from the concern that fracking causes earthquakes to whether the fracking process may propagate fractures to the ground surface, to the role of fugitive gas leakage and fracking fluids from active hydrocarbon wells, abandoned wells, natural faults and fissures.

Documentary films such as Gasland, FrackNation and Gasland, Part II are new media examples focusing on the debate. Jurisdictions across the globe (New York State, Quebec (Canada), Germany, the Netherlands and France) are so concerned about the uncertainties associated with fracking and groundwater contamination that moratoria are in place until the media storm and uncertainties subside.

Bio

A Newfoundlander by birth, W. Todd Jarvis is the Interim Director of the Institute for Water & Watersheds at Oregon State University, one of the 54 Water



Resources Research Institutes located across the United States celebrating the 50th anniversary of the federal Water Resources Research Act of 1964. Todd is a consulting groundwater hydrologist with 30 years of experience working for global water/wastewater engineering and groundwater engineering firms. His new book *Contesting Hidden Waters: Conflict Resolution for Groundwater and Aquifers* is available through Earthscan:

<http://www.routledge.com/books/details/9780415632935/>