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A Road to Sustainability

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A ROAD TO SUSTAINABILITY[1]

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ABSTRACT

We live in a universe born of and sustained by a continuous, extensive and universal pattern of resource asymmetry. Water plays critical roles in environmental/ecological/human sustainability, yet delicate ecological balances are often critical to the maintenance of conditions necessary to our survival. The sheer number of human beings and our environmental indifference and abuse of the planet's resources in light of these observations results in the greatest threats to our survival. Our challenge is to learn from this viewpoint and fit resource management and policy to the pattern. The universally ubiquitous pattern of environmental resource asymmetry presented here is both the problem and the key to sustainability.

The paper reviews some past and present (new, known, and forgotten) lessons to help us face the challenge of natural resource, ecological, and human sustainability, how that might be accomplished, and to provide vital information from current literature dealing with petroleum, climate change, and, of course, water on this third planet from our Sun, erroneously called "Earth."

The presentation reviews the dangerous situation in which we find ourselves; the universal pattern that underlies the distribution of energy, matter, space, and time; some examples of how policies and management can make use of the pattern to give us a chance to ensure our sustainability. I draw on many months of library research since I retired in 2000. Since 1995 when I first published a naïve version in the *Renewable Natural Resources Journal*, I have attended lectures, read books, scientific periodicals, and news articles. The underlying universal pattern is simultaneously the source of local and global environmental challenges, a challenge for all to consider, and the potential and perhaps only solution to our resources policy and management that must underlie our successful – sustainable – survival.

The result is an analysis of Earth's current challenges to us, the most invasive of species. It will generate discussion by being thorough, thoughtful, and insightful, not by "sky-is-falling" scare tactics and irresponsible journalistic ranting and raving, as warranted as they may be. I invite all to share their thoughts with me.

The footnote is: [1] Alternative titles, available for free download at my website (www.watershedhydrology.com), include *A Canary in the Coalmine, Lessons from the Past to Sustain the Future, A World of Water, The Resource Buffer Theory*, and in *Ecological Sustainability: a New Look at an Old Paradigm.*