

WATER PANEL INTRODUCTION

[WELCOME, GREETINGS & ACKNOWLEDGEMENTS]

Although it is tempting to do so, and often unavoidable, no conscientious panel moderator intentionally steals the thunder of his or her panelists by reciting a litany of the facts and figures which those panelists, as the invited authorities, have worked so hard to collect and explain. It is more appropriate, rather, for the moderator to set the tone, to prepare the canvas on which the panelists apply their compositions.

That said, some basic facts from the World Health Organization (WHO) are in order. We've all heard this accounting before so let's jump to the end: less than 1% of the world's fresh water (or about 0.007% of all water on earth) is readily accessible for direct human uses. Fresh water resources are unevenly distributed by climate to varying population densities. That much is obvious. Precipitation and river flows result in a per capita availability of water that is lowest in Asia, even though it has the world's greatest river flow. By contrast, the populations of Australia/Oceania enjoy a high per capita run-off share, in spite of the fact that most of the continent is dry. Currently, humans are using about half of the 12,500 cubic kilometers available worldwide. The balance is needed to sustain healthy wetlands, estuaries, and fisheries.

That description rightly suggests that fresh water is limited, perhaps precious, but it also implies that a certain sustainable, natural order is in place. That is not the case...the WHO and UNICEF reported in 2004 that, presently, 2.6 billion human beings — over 40 percent of the planet's inhabitants — lack basic sanitation, and more than one billion people (1 in 6) still drink unsafe water. And conditions grow worse. Nor is it strictly a case of population growth outstripping delivery systems. Those last two figures confirm that there are fundamental structural flaws in our "idea" of water and its role in our lives.

A touch of science and philosophy are in order to prepare the canvas I mentioned.

We'll begin with the Greeks. Thales of Miletus (640-546 BCE), one of the originators of the "deductive" scientific method, wrote that "the seeds of everything have a moist nature," meaning that water is the basic element from which everything begins. At virtually the same moment in history Lao Tzu (604-531 BCE) recorded the accepted wisdom of the time... "Water gives life to the ten thousand things and, yet, it does not strive."

Some 2,500 years later, in 1970, evidence was presented for the first time by microbiologist Bruce Parker of Virginia Polytechnic Institute, writing in *Natural History*, that tiny animals and plants are feeding, growing and even reproducing... in the clouds. And, in 2001, exobiologists Lynn Rothschild and Rocco Mancinelli, in the journal *Nature*, declared that ***no known living thing can function without water***, and, more important for our purposes, that ***there is life wherever there is water on Earth***. It's on the record.

We need to change our perception of the element. What we hear and discuss this evening must be free of any confusion on the understanding that water is physically unique, that it is unlike any other component in our world... that water is, by its nature, inimical to marketing and trade, ownership, or political boundaries...that, purely and simply, no single population will survive in the absence of clean water and no larger population will survive long in the presence of that necrosis.

So, join me in welcoming etc....