Imagining and Creating a World in Harmony with Earth's Water Cycle

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The world-at-large is now facing a monumental design challenge: how to satisfy the water demands of a human population headed toward 9 billion people while at the same time protecting the aquatic ecosystems that support our economies and so much other life on this planet. To date, the benefits of water development have largely been measured in the additional hectares irrigated, kilowatt-hours generated, and populations supplied with drinking water, while water's ecological functions have largely been ignored. A new approach is needed, one that integrates ecological health and ecosystem services into water planning, policy, and management by setting boundaries on the degree to which human actions modify and degrade freshwater ecosystems. The beauty of such a boundary is that it not only safeguards ecological health, it drives up water productivity – the benefit derived from each liter of water extracted from a river, lake, or aquifer. Fortunately, a number of nations and regions, including Australia, the European Union, South Africa, and parts of the United States and Canada are pioneering policies that establish such boundaries and begin to reshape water use.

A world in harmony with Earth's water cycle will be one in which water is shared more equitably, used more effectively, and preserved to support nature's work. Getting there will require that we at least double water productivity in agriculture, industry, and cities. It will require, too, that we address the ethical and spiritual roots of the ecological dilemma in which we currently are trapped. Envisioning a world in harmony with earth's water cycle is not only possible; it is the first step toward working with intention to create it.