**Water Is Life**



By Jim Lauria



In the Beginning, there was water. The first couple of lines of the Bible describe a newly formed earth covered in water, a swirling deep. From there, the rest of creation emerged.

In nearly any religion or belief system, water is life. It's a truism, a cliche, a corporate slogan, an affirmation. And whether it's stated tritely or with deep meaning, it's irrefutable.

Everybody has their own connections with water. Maybe they're sun-blazed memories of childhood days at the beach with family, watching the waves flood your sandcastle, or gazing at your own kids splashing in a wading pool. Maybe it's a waterfall you found along a forest trail, or the feeling of a mouthful of cool, sweet water quenching your thirst after a hot basketball game. Or watering your garden, hauling a tank to thirsty livestock, surfing, storm watching, or the clink of ice in a glass of drinking water or the rolling boil in a pasta pot. Whatever we do, water flows through it. As environmentalist, author and entrepreneur Paul Hawken said, "Water is habitat. Water is life."

Hawken summed up water in a handful of words. But to dive deeper into the central role water plays in life, we turn to the world's best whole-systems thinker, the very definition of a Renaissance man, a water expert from the very start of his career: Leonardo da Vinci.

**Micro And Macro**

Leonardo combined radiant and linear thinking. He had the ability to dive into granular detail and also see the big picture, dissecting parts to understand the whole. His famous Vitruvian Man drawing, the model's arms drawn and redrawn to define a "cosmography of the microcosm," illustrates the artist's concept of the parallels between the human body and the universe as a whole. And whether pumping as blood or flowing as a churning river, water unites them.

Leonardo's exploration of the links between macro and micro levels is more than just art and even more than just contemplations on man's standing in the cosmos.

The *Codex Leicester* is a compilation of Leonardo's writings on water, from underground stores to *vene d'aqua*— veins of water. In the notebook's 72 pages of mirror writing and drawings, Leonardo drew 730 conclusions on water alone. In the notebook, Leonardo accurately described the hydrological cycle — the endless loop of evaporation, condensation and precipitation that binds our global water supply. Considering the analogy of the human body with its own hydrological cycle, we begin to see that water operates at more than one level, plays a variety of roles, and varies in its value.

As Leonardo wrote, "It suffers change into as many natures as are the different places through which it passes."

When we use that understanding as inspiration to think more broadly about water, we can stop thinking of water as some sort of colorless monolith and start considering how to value water — as potable water, brackish water, process water, graywater, wastewater, natural water, groundwater — and cycle it all back again.

**Teamwork**

Management guru and fellow Leonardo fan Michael Gelb tells us that Leonardo's favorite image was of the rippling of water when a stone was dropped in.

Those ripples are not just beautiful, symmetrical, and hypnotic. For me, they're also a metaphor for the expanding energy that water exerts on my life. I was drawn to water as a young engineer at a Florida sugar mill responsible, among other things, for the plant's water discharges. My career grew, and so did my horizons, as work brought me around the world, including several years as a businessman in Hong Kong. My work in water touched my curiosity about the world around me and inspired me to think deeper about water, to immerse myself in the subject, to read and write and lecture and podcast about it.

This sums it up in a nutshell: I'm a guy from Queens who spoke at the Texas Rodeo about Israeli filtration technology being used by Singapore's water utility. If that's not a global view of water, what is?

Ultimately, the ripples from my water career have reached others as I looked for ways to pull together a team of friends and colleagues who share my fascination with water and my commitment to tell its story to a wider audience. Steve Bhaerman is a brilliant wordsmith and deep thinker, a comical engineer to my chemical engineer. Steve has been a sounding board, instigator, investigator, and co-creator of the series of essays that starts with this one. Steve introduced me to Brian Narelle, a cartoonist with a sharp pen and a sharp mind. Finally, Steve Werblow has been my writing partner and editor for well over a decade, collaborating with me on stories from around the world.

We've been letting the ideas flow for years, and the tide is finally high.

As Leonardo da Vinci wrote, "In time and with water, everything changes." Through this series of essays, we'll explore time, water and change, each installment dipping into one of the many ways water touches us and keeps the universe flowing.

But one thing about water doesn't ever change: water is life. Or as Steve Bhaerman likes to say, "We humans, without water, we're sunk."