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GLOBAL VILLAGE

Fresh Water Crisis Growing

by Tapan Munroe



"When the well is dry, we know the worth of water" - Benjamin Franklin

The wisdom of one of our founding fathers, an American renaissance man, has never been more relevant than now with the world and the United States in a crisis of fresh water supplies.

California currently is facing a near-drought situation with the driest March and April in decades. In the San Joaquin Valley thousands of acres of farmland are lying fallow. In Southern California water officials are requesting voluntary water conservation measures and in some cases mandatory conservation measures are being imposed.

In the East Bay, East Bay Municipal District, the largest water supplier in the region with 1.35 million customers in 20 cities, is considering measures such as mandatory rationing via higher price of water, limitations on outdoor sprinkling and car washing, and voluntary water conservation, according to recent Contra Costa County Times.

In our state and in the Bay Area we have had a water problem for decades. It has escalated with the growth of the economy, rising prosperity and population growth. When we add the impact of climate change to this equation, the problem gets worse.

In the past decades most of the strategies for meeting the water needs of a growing economy and population has been met via what experts call the "hard path." This has involved developing new sources of water by building massive dams, aqueducts, canals and large water treatment plants. The past century has been the era of "build and grow" as far as meeting our water needs are concerned. Undoubtedly the hard path has produced enormous benefits such as clean water supplies, irrigation and better health in our state and the nation.

Peter Gleick of the Oakland-based Pacific Research Institute correctly points out that despite building these grand infrastructures, we have not solved our water-related problems and we have been saddled with large scale ecological damage as well as destruction to many of our most scenic locations.

On a worldwide basis, despite billions of dollars in investment, more than 1 billion people lacked access to clean drinking water at the end of the 20th century.

In the 21st century we need to think in terms of the "soft path" — one which seeks to improve the productivity of water use and match delivery of water to the needs of the users instead of just seeking new supplies of water, as Nature magazine had pointed out. The "soft path" is the smart path for the new century.

The folks at the Pacific Research Institute summarize the "soft path" as the approach that matches water services to the needs of the user. In addition it considers the ecological and social needs in order to maintain balance between the needs of man and nature in a sustainable way.

One of the strategies in this approach is that different qualities of water are used for different uses.

For example, recycled waste water is used in irrigating lawns and golf courses, parks, school grounds and to meet certain industrial needs. It makes no sense to flush our wastewater into rivers, bays and the ocean.

Water recycling is not new to California. Our growers have used recycled water for more than a century. Today, it is a widespread practice in California agriculture with nearly 580,000 acre feet of recycled water used in irrigating our crops and orchards.

Current water supplies in the Bay Area are not adequate to meet the increase of 1.7 million more people in the region in the next 25 years that the Association of Bay Area Governments predicts.

The need for a reliable supply of water that can withstand periodic droughts and meet the needs of a growing population and a dynamic economy that is already here is urgent. This is well within our reach if we use recycled water.

Much to Bay Area's credit, a regional partnership involving 17 water-related agencies was formed and a master plan developed in 1999. This resulted in the building of several water-recycling projects around the Bay including the one operated by the Delta Diablo Sanitation District in Antioch.

The recycled water from this project is used in the cooling of two power plants as well as and park and landscape irrigation.

In a recent conversation with Gary Darling, general manager of the Delta Diablo Sanitation District, he said, "The regional approach to our water-recycling projects make eminent sense in economic and logistic terms."

Currently there are seven much needed additional water recycling projects under consideration, two of which are under construction and the remaining five are ready to begin construction once they are fully funded. These include the Pittsburgh Recycled Water Project (under construction), the Antioch Recycled Water Project, the Redwood City Recycled Water Project, The South Santa Clara County Recycled Water Project, the South Bay Advanced Recycled Water Treatment Facility; The Mountain View Moffett Area recycled Water Pipeline Project (under construction), and the North Coast County Water District Recycled Water Project.

The money for these projects are expected to come from various sources: 50 percent from local sources, 25 percent from the state (Proposition 50) and 25% from the federal government via bill sponsored by Rep. George Miller of Martinez (HR 1526). The measure has passed the House and Senate and awaits the signature of the president.

I hope that this measure is approved. There are major economic, environmental and quality-of-life benefits from large-scale recycling of water for our region.

Let us remember that ..." It is only waste water when we waste it" (Gary Darling).

Tapan Munroe, an economist and longtime resident of Contra Costa County, is a director of LECG LLC, a worldwide financial and economic consulting firm with headquarters in Emeryville. His column runs every other Sunday in the Contra Costa Times. Opinions expressed here reflect his viewpoint only. Tapan can be reached at tapan@tapanmunroe.com.