

# VILLAGE VIEW

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There's nothing unusual about flying in a small plane between Hyannis and Boston; there was, however, something unusual about the scene spread like a huge map below the aircraft I rode a few weeks ago.

As I gazed down and traced the double-barrelled highway of Route 3, looking like a pair of snakes slithering around ponds and lakes through the woodlands of Plymouth and Norfolk Counties, the water-level of the many bodies of fresh water was disturbingly low. Rimming nearly every pond a band of golden sand separated the black water surfaces from the russet of the surrounding forests. In some of the larger lakes, wide expanses of golden sand that should have been well below the water's surface were laid bare. From the air, they looked like huge saltwater sandbars at low tide.

As I sat strapped in my seat watching the familiar landmarks of the shoreline unfold below, a finger of foreboding traced between my shoulderblades, up my spinal column and lodged like a leaden weight about two inches above the nape of my neck. "We could be in for a serious water shortage."

In the years 1961-65 Cape Cod, along with the entire northeast, experienced a drought. Back then, people stopped watering lawns, washing cars, using dishwashers; they flushed toilets only when absolutely necessary. Water used for washing dishes was carried carefully in the dishpan from sink to gardens and poured sparingly around tomato plants and cherished shallow-rooted evergreens to keep them from dying of thirst. Those who could drained rinse water from clothes washers and used it similarly where it was needed most.

Another drought like that one could mean serious trouble, especially for the Cape. Unlike other parts of New England, all Cape Cod fresh water comes from a single aquifer, a lens of water underlying our sandy soil; because its specific gravity is lower than that of salt water, it floats on top of the brackish water below. As the fresh water is drawn off, unless it's replenished with adequate precipitation, the lens of fresh water is gradually depleted. Initially, communities along the shore are affected. Provincetown is already buying water from Truro and the National Seashore, partly because of salt-water intrusion, partly because of leachate pollution into its own fresh water wells.

The four-year drought that began twenty years ago has faded from memory for many. It's possible half those now living on Cape Cod don't recall it at all; either they are too young or were living elsewhere during those parched summers. Those who lived here then remember it well.

The cold foreboding comes not only from that recollection but also from the known differences in the situation Cape Cod faces these two decades of growth and progress later. Our next drought is certain to be far more serious than the last, even if it's less severe in terms of precipitation shortage. The three biggest reasons for this are worth noting.

First, 17 percent more people live in New England, overall, than lived here twenty years ago. That's bad news for the whole area. But Cape Cod's population has increased by close to 100% in the last two decades. More people use proportionately more water.

Second, there's less reserve capacity in the Cape's water supply than there was prior to the '60s, and fewer emergency supplies now to be tapped. Many potential water supply areas have been covered with new buildings, paved for parking areas, or destroyed by housing developments.

Lastly, much of the Cape's presently existing and remaining and potential water supplies have been and are being contaminated. While most water supply contamination results from improper disposal of industrial chemicals such as solvents, degreasing agents, gasoline leakage from underground storage tanks, other sources of contamination affect the Cape's single water source that's shared by all of Barnstable County from Canal to Capetip, from Bay to Sound, from Buzzards Bay to the Atlantic. These include improperly functioning septic systems, leachate from road salt storage bins and road salting operations, and leachate from improperly designed and operated landfills.

Unlike other parts of New England (and the water-shortage will affect the entire region as surely as it will our small portion of it) we have but a single source of fresh water. Some refer to it as ground water. Where the level of the land is low, we have swamps; where the land is deeply hollowed, we have ponds; where we dig down and find fresh water, we call it ground water. It's all the same puddle and from it, we draw our water.

Near landfill disposal areas private well water may contain a higher level of contaminants than that flowing from the storage tank in your community and, unless you have a private well, your faucets deliver water that almost certainly contains purifying chemicals to render it potable and safe. But leachates are in your water, and saltwater is, too. These will rise in concentration if we have another drought. Maybe you can't taste it yet, but with double the number of people drawing on our only water source as drew from it two decades ago, when another drought strikes, salt and contaminant content in drinking water will rise.

Twenty years ago, bottled water was never seen on Cape supermarket shelves. You'll find it here today. People with heart trouble or hypertension buy their drinking and cooking water.

The drought of the '60s wasn't the first in the area. National Weather Service statistics reveal New England suffered a severe lack of precipitation in the early 1900s. The drought of 1908 to 1911 was important because at that time water supply systems for many Massachusetts communities were designed by engineers of that era to withstand another drought of similar severity. The variable they couldn't project, however, was the area's growth; who, in 1911, could possibly have foreseen the mushrooming population inhabiting the northeast, and Cape Cod, today?

My foreboding may be a false alarm. Spring rains may descend upon us in floods. There may be a deluge. We may have one of our wettest summers in history. Predicting Cape Cod's weather for longer than 24 hours into the future is as iffy as guessing which way stock or gold prices will move. But there's a prediction I can safely make; drought conditions are cyclical and when another comes, Cape Cod will suffer.

Anyone who's lived without clean, clear, cool, pure water for 24, 12, or even six hours will share my foreboding. I'm hoping for lots of rain. If hoping has any influence, we'd all better do a lot of it between now and the 4th of July and keep hoping right through Labor Day.

Cape Cod's water supply is at a critically low level. For Barnstable County, as well as for the rest of New England, that fact, coupled with our present population density, could mean we all start buying drinking and cooking water. Think about the possibility of adding the expense of around a dollar a gallon to your present strained budget while your lawns, gardens and trees wither and die.

The icy finger of foreboding may trace its way up your own backbone, just as it crept up mine.