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water

Texas' Water Future

What if it isn't there—or if it's too costly?

Dust storm towers over Texas farm. Continued drought has created conditions for frequent dust storms.

MOST TEXANS, especially those in cities, or transplants, take their water for granted—just go turn on the faucet and it flows, dependable, beautiful, pure and cheap! "Cheap" is a large part of the reason for the higher levels of water use per person (per capita), along with modern life styles and our water utilities' efficiency of service. But some cities, towns and regions are not on the water conservation bandwagon yet and don't seem to want to be. Rather, they would go the old fashioned, but seemingly "easier" ways: desalination, pipelines to other sources, new reservoirs or other more grandiose plans.

Many of our engineers, city planners and others were trained that way for many, many decades; some still are. Architects, landscape architects, horticulturalists and plant growers have long ignored or dismissed water conservation as a key part of their programs. Many, if not all, Texas universities have produced in their excellent geology departments great numbers of geologists and hydrologists all trained for the oil and gas or mining industries—not for water resources.

On the agricultural side of the water issue, change has been happening in agricultural irrigation conservation for several decades and real progress has been made. Unfortunately, much of the progress has been made on the sprinkler system segment of irrigated farming and a downside is that these changes are very expensive.

In areas with crops that use or require either flood or furrow irrigation, not as much progress has been made towards conservation. It is a much more difficult problem and often there are not many, if any, good efficient and cost-effective answers.

The engineering issues of massive delivery systems of water from rivers or lakes is being tackled, but again it is late and expensive, but can result in huge water savings. **Saving water = saving dollars, too.**

The on-field furrow delivery system is a tough issue. Drip irrigation and the use of plastic mulches and no-till farming practices can reduce water demands and produce a higher crop yield. I have seen drip irrigated cotton in far West Texas produce four bales per acre commercially. That will pay for a lot of drip pipe! Mulches on vegetables and other crops in the Uvalde region have saved water, reduced weeds and improved yields. Other, more water efficient crops are being used to increase conservation.

Most politicians and urban managers or planners have likewise been educated and brought up in the old paradigms of water and wastewater systems complimenting their technically trained allies.

So, it seems that **"Houston, we have a problem!"**

And, bottom line is, we must get the Texas public educated and aware of the issues and of the common-sense, water-conserving answers to our problems. Until you folks ask for and maybe demand these changes, not much will happen—the market must drive change.

Change is often not easy and seldom cheap in the short term, but we have to think long-term. City and state leaders as well as the construction industry and developers do not want to think change or promote smart growth principles and water conserving programs that dig deep into the public and may cause a little mental anguish.

A few cities in Texas and the Southwest are now using some good water conservation practices reducing their per capita consumption. But, in general, what has been done is the easy, painless stuff. We

are now going to have to dig deeper into our Texan cultural history and make the tougher decisions. For our kids' futures we must do it . . . or watch them move away to greener pastures.

We must do serious, major water conservation!

You can see, with our present population, high water demands, future growth predictions and shrinking water resources compounded by droughts and climatic changes, there are no other options. We cannot fail to act. We must make institutional and personal changes to assure a healthy, sustainable Texas in the future. Sure we may hate to plan differently and even restrict growth in certain areas to fit our water resources—that may cost some business dollars. But, the other side of the coin is ignoring it and keeping our heads in the sand and having massive issues of areas running totally out of water. What will that cost in populations, business dollars and property values?

Extreme drought has lowered water levels in Lake Travis, exposing areas not seen in years. Photo courtesy Lower Colorado River Authority.

Many of our key lakes are almost dry, rivers and creeks running at way below average and major aquifers dropping. We have to get involved and act locally and regionally. Our rivers do not have "extra water" and are over-appropriated now – our beautiful and economically valuable Gulf bays and estuaries are too salty now due to low river flows and reduced flooding.

State agencies ignore state appointed river committees' recommendations and keep plugging towards that "water resources cliff." Our state's water management and planning is so fragmented between competing agencies that the resources and sometimes the public suffer. Consolidation into one efficient state agency would be a great step toward managing our waters. Surface and ground water is connected—not separate.

Petroleum uses and effects upon water supplies, whether on the surface or 5,000 feet deep, require an intelligent water agency's guiding hand. We still are not doing all that could and should be done to reduce and eliminate surface and groundwater pollution.

Seeing our legislature taking a good, long and hopefully, logical look at our State Water Plan and its financing is hopeful. But going for the big, expensive and glamorous water projects will often cause more problems and not reduce our appetite for what is now more precious than gold, oil or gas—water!

Sure, we need to keep praying for rain, but we need to carry out our end of the Biblical agreement too and protect and conserve our water resources. As a Texas agricultural researcher once stated - in 1937—"Don't pray for rain, if you can't take care of what you have!"

And always remember, **"Water is Life!"**♢

WATER STORAGE TANKS

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- Water tank **level gauges**
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Picture perfect! We recently installed this Galaxy water tank in a subdivision near Fredericksburg, Texas. Situated on a lower grade than the house allows the homeowner to keep this beautiful view, and also have a potential to store 30,000 gallons of rainwater.

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