

ETHANOL PRODUCTION

Midwestern corn farmers are delighted with our evolving national biofuels energy policy. Corn ethanol production has inflated the value of their product to levels higher than ever imagined. On the other hand, dairy, livestock, and poultry producers are struggling for economic viability. Never has it cost so much to feed corn to animals. Rations have been modified as tightly as possible, usually leading to diminished production of milk, meat, and eggs. There is a glaring diversity of opinion regarding the use of corn for food, feed and also fuel.

Robert Glennon, University of Arizona professor of law and public policy and author of water-use planning gave his opinion as keynote speaker at the Irrigation Association Show in Phoenix earlier this month. Glennon said, “Energy policy in the United States has developed in utter disregard to water implications for different kinds of energy production.” He argued that water use should be more stringently monitored and specifically pointed his finger at corn producers and the ethanol industry.

Glennon raised a few eyebrows, and also received approving nods with the following assessment. “The poster child for me on this is ethanol. It may seem surprising that even in a modern refinery that recycles its water, four gallons of water is required to refine a gallon of ethanol. So, a 50-million-gallon plant needs 200 million gallons of water.”

Glennon went on to note that “corn is a very water consumptive crop requiring as much as 2,500 gallons of water to grow enough corn to produce one gallon of ethanol.” In his mind that is a low-value crop for use of a high-value resource. He is not alone in suggesting that water should be used for “higher and better” purposes than growing agricultural crops for any reason. Obviously, he has never been hungry.

The speaker said, “I want you to remember three years ago that Congress proclaimed by 2022 we should produce 36 billion gallons of ethanol or biofuels including ethanol. That is a lot of water when you do the math. To show how out of control the idea of producing biofuels is related to supply, California has a goal of producing one billion gallons of ethanol in 10 years. That would require every drop of water that goes through the Bay Delta that currently irrigates seven million acres of the most productive agricultural land in the country, the Central Valley, and the water provided to Southern California cities—water diverted to growing corn. If that is not madness then I don’t know what madness could be.”

In a partial summary, Glennon said, “We know that it requires a lot of water to produce energy. Conversely it takes a lot of energy to move, pump, cleanse and deliver water.” He said one-fifth of all the electricity used in California is to move water around and treat it.

It is often hard to know which policies make economic, environmental and social sense and which do not. Strategies that appear logical on the surface are often questionable with additional examination. Likewise, some practices that are often questioned ultimately prove to have unusual substance. The controversy of food versus fuel will require ongoing dialogue, study, and research. Ethanol may make economic sense for growers of corn, but it is economic disaster for animal agriculture. Hopefully, we can quickly find mutually beneficial ground for all segments.