

Globalization and Drought Have Ravaged Texas Farming

Mr. Barron is a farm broadcaster and farmer in Lubbock, West Texas. He raises horses, pigs, cotton, and stock show animals. Marcia Merry Baker interviewed him on March 15.

EIR: We'd appreciate a situation report from you. As of mid-March, we're seeing headlines of the immediate emergency situation, in terms of the dryness, the winds, and the wildfires at large in this whole region. But we also want to get from you a report on the kind of economic geography in West Texas—the crops and livestock picture, what's happened under free trade, and the infrastructure situation. But what are the dimensions of this wildfire emergency? (**Figure 1**)

Barron: Well, it's been as bad as reported on, and probably a lot worse than what's been reported so far, through the media. I've been working on some of that myself, as a farm broadcaster in West Texas, along with a couple of the farm broadcasters in the Panhandle, closer to the fires in the Amarillo area. They had tremendous fires, this last weekend, particularly on Sunday [March 12], burned up thousands of acres—actually, we lost some livestock unfortunately in that fire.

EIR: They're saying about 10,000 cattle. That's huge! Is that in the range of loss?

Barron: I don't know the numbers exactly. There's a lot of numbers being tossed around, but there's a lot of loss. And there's a lot that didn't get lost in the fire, that now have to search for a new home, pasture-wise, to feed.

EIR: Let's come back to that. Let's first pursue the general situation. You would characterize the Panhandle as a combination of dryland agriculture and irrigated agriculture, right?

Barron: It's about 50-50, yes.

EIR: And so, if we just stick to physical geography for a minute, you've got a kind of world-class formation called the Ogallala aquifer. You're in the southern part of what they call that, in West Texas? (**Figures 2-3**)

Barron: Correct.

EIR: Now, in general, the water level underground has been going down year by year since the 1930s. What does this

mean for every day, in ranching and farming, and cropping, as the whole complex there in West Texas has had to try to adjust to this, as far as water usage?

Barron: Yeah, we need y'all to send us more water, that's right! We're getting thirsty!

We're having to convert irrigated acres to dryland acres more every year, because that water table is drying up from the south to the north; because up in Nebraska, the central part of the U.S. sits over a bigger part of that Ogallala aquifer. We're on the southern end of it, as you mentioned.

Where I grew up, 60 miles south of Lubbock, we used to irrigate out of that aquifer back in the '60s and '70s, but that water diminished there by the mid-'70s, and that's where we had to stack and sell off our irrigation pipe and go to complete dryland cotton farming, in that region. And that's what we're seeing happen from the south to the north (**Figure 4**).

In the immediate Lubbock area, we only have what we call supplemental irrigation, meaning that we don't have enough water left to fully irrigate a crop. We've got to depend on Mother Nature and rainfall to really give us probably 75% of our needed moisture, and we can supplement maybe the rest with irrigation. And as you move north towards Plainview and Amarillo in the Panhandle, then the water gets a little bit better, but even the producers in that area talk about big drops in the water levels in their water wells.

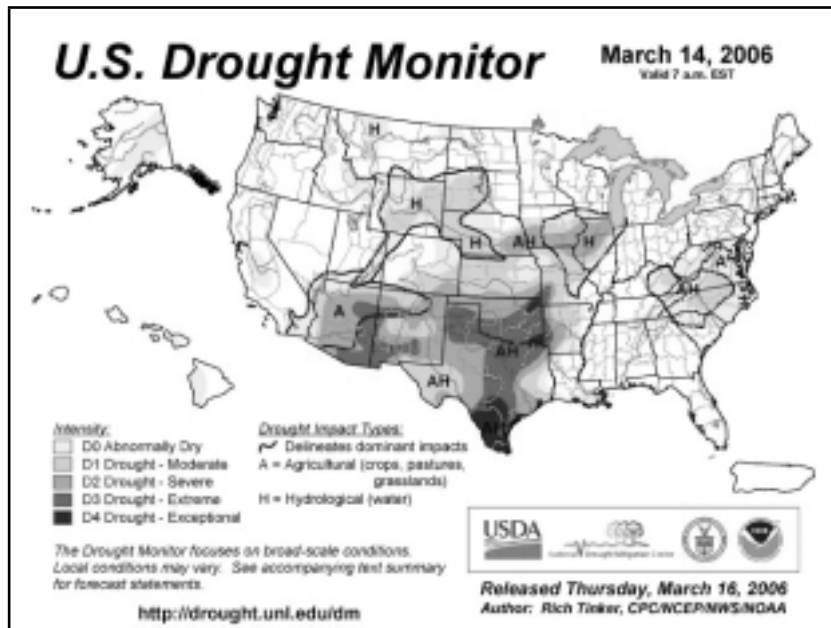
So, we're facing a dilemma in underground water supply, no doubt. Mother Nature and her associated droughts, like we've been in the middle of, really, for about the last dozen years or so, have put a big drain and a lot of pressure on that underground water supply. And we need to get back into a rainy pattern once again, to help alleviate some of that pressure and stress. But, that's kind of out of our hands, and we've just got to wait and see what Mother Nature brings in that regard.

EIR: I understand, too, as far as weather patterns, that when it comes to the timing and frequency of rainfall, Texas is characterized by having maybe 80% of what rainfall it does receive, come in the form of storm run-off and floods. So it may not percolate down in any useful way, right?

Barron: Yes, we have what we call "playa lakes" out in the countryside, just low basins in the topography, and then when it rains an inch an hour, which is a hard rain, probably half of

FIGURE 1

Severe Drought Conditions in Southwestern States, March 14, 2006



Extensive parts of Texas, Oklahoma, New Mexico, and Arizona were experiencing “extreme” conditions of drought in mid-March, as measured by the combined Federal inter-agency “U.S. Drought Monitor” system. This region lies in what is historically called the Great American Desert. “U.S. Drought Monitor,” issued weekly, also offers animated maps of seasonal drought patterns nationally.

that runs off into the playa lakes and this and that, and does not soak down into the soil profile where it can be utilized by the plants. We get very few slow, soaking, gentle rains that’ll soak in 90%. Most of ours are fast, hard, springtime thunder-showers with lots of runoff.

But our actual totals of moisture have been down substantially, not only in West Texas, but all over the Southwest, and it’s putting a lot of pressure on farmers and ranchers.

EIR: Your soil gets so dry, and there’s only so much you can do. Some of your Texas agriculture researchers try and work on precision irrigation, or try and have certain kinds of crop rotations, like a sequence of sorghum and cotton. But there’s only so much you can do, if the water isn’t there. Is that the bottom line?

Barron: For sure! You know, as producers—and I’m still a producer myself—we can only do so much in controlling variables in successful crop or pasture yields. And Mother Nature and rainfall is about 90% of the success or failure of a cropping season, and that’s completely out of our hands. So, we can implement the latest in technology, which we do all the time with new technology in irrigation, precision fertilizer application, the latest in equipment and tractors and seed, and biotechnology, and all the new tools that are out there and all.

But still, that doesn’t offset the loss that we have due to drought and lack of moisture.

And associated costs, also, of that new technology, are tremendously high, and with our still low, low prices for all major commodities and livestock, it’s hard to justify that higher technology cost.

EIR: So it’s a disconnect in some ways? Because it isn’t pie-in-the-sky-technology—it’s terrific stuff—but you can’t buy it, because the relative expense is so high.

Barron: You know our main crop is cotton around Lubbock. We raise peanuts quite a bit nowadays, over the last 8-10 years; and as you travel north, you get into some corn, sorghum, and wheat pasture for cattle, as well as range and pasture. But in the case of cotton, which makes up about 85% of the acres in the immediate West Texas/Lubbock area, the price we receive for cotton today is still the same price as we got back in 1949, which is about \$.50 a pound!

EIR: That brings up the water price. You said that in many cases you don’t have the water, and you’ve ceased pumping. But now, even if you did have some water to pump, with the hyper-prices of energy, it must be prohibitive—natural gas, electric-

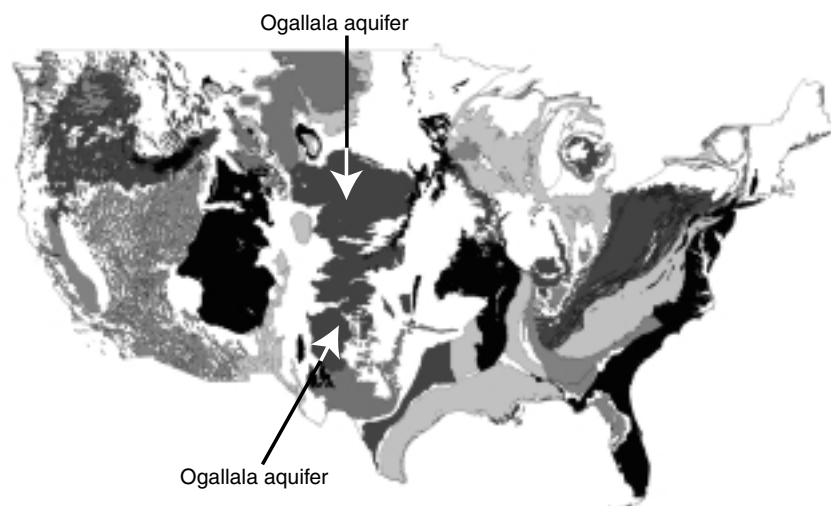
ity, whatever you use to run the pumps? (Figure 5)

Barron: Oh, yes! Price of energy—you know the price to put gasoline in your car has risen tremendously, putting a strain on your budget; every consumer’s faced with higher energy costs. And out in the fields, these big John Deere diesel tractors will utilize, in a full day of operation, about \$1,000 per tractor. That’s a tremendous expense, and it’s doubled in the last 12 months (Figure 6).

And then, to pump the wells with natural gas or electricity, those expenses have also doubled, while the price for the product, for the commodity, for peanuts or cotton, has not gone up to speak of. Our yields have improved a *little bit* with the new technology, but not nearly enough to offset the rising cost of production, so that puts all of us in a tremendous predicament. And particularly in the face of this globalization, this world trade process that’s being bantered around so much.

EIR: Let’s pick that up. I think the parlor-room polite term is “global sourcing,” that that was supposed to be good for everyone. They say the General Agreement on Tariffs and Trade that started up in the 1980s (you know, the father of the World Trade Organization), their motto was “one world, one market.” But I think we’ve reached the end of the line of any

FIGURE 2

U.S. 66 Principal Aquifers

Tones differentiate the aquifer locations in the map. The Ogallala (High Plains) Aquifer spans parts of eight states.

In the year 2000, of the 66 principal aquifers, eight of them provided 45% of the total groundwater use; and the High Plains Aquifer alone provided 23% of national groundwater use. A total of 57,400 million gallons per day is used from these nine aquifers and 19,100 million gallons per day from the other 57 aquifers. Groundwater accounted for about 21% of fresh water in 2000.

Will we learn the lessons of the farmer? A man with oil thinks he's rich, but a man without water knows he's not!

Source: U.S. Geological Survey.

pretense that this is anything but a disaster for everyone. What is the picture for cotton, for example, in all aspects of globalization? Low price to the farmer, seed control, and all?

Barron: We raise the cotton out here on the plains of Texas, as well as the other cotton-growing regions from California across to the Carolinas. We used to have enough textile mills along the East Coast, in Virginia and the Carolinas, to process the bigger part of our domestic cotton, and make our own clothes right here at home, but we've lost 50-plus percent of that textile mill capacity to Mexico, and now over to China. So, we have to export our raw cotton to other countries to get our clothes made, which makes for a bad situation, and puts a lot of pressure on our producers. Matter of fact, it's getting to the point where we're seeing a lot of producers talking about trying to get some of the mills to come back, or build new mills, if cost-feasible, to start processing our own cotton domestically once again, and not get so dependent on foreign mills for our clothes production. We see what it's done to us—foreign dependence in the oil business since the '70s—and we don't think it a good idea to keep heading toward foreign dependence in our food and fiber system.

EIR: So there's the crazy cross-hauling, the low prices to farmers, and control over processing and marketing. Wasn't cotton a forerunner in the move for extreme control by Monsanto, after it acquired sweeping patent rights for bio-engineering from the Delta and Pine Land company? What about the patterns of extreme control of seeds and plant varieties being consolidated, such as you see in the Roundup Ready line of Monsanto for corn, soybeans, and so forth?

Barron: You've got a lot of different potential dangers there,

that we study on a daily basis, and I broadcast about in my radio programming in West Texas. Monsanto is kind of the "father," I guess, of most of what you just described—tremendous fear in several different areas.

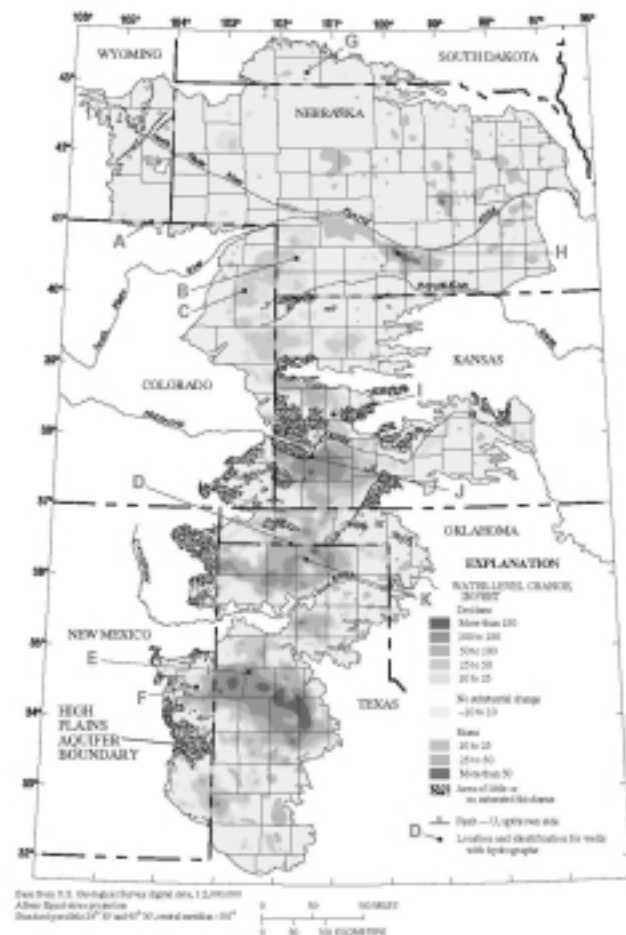
Number 1, is on the food side—getting away from cotton and going to the food supply—through the corn and through the soybeans and more of the food-style crops, we're seeing more genetically modified food that we're all buying, purchasing, consuming, and feeding our kids: There hasn't been enough independent research on the long-term effects of that genetically modified food, from a health and food safety standpoint. So, there's no doubt that there should be a little bit of concern there.

The European Union countries, I think, are exemplifying that concern, in that they still are rejecting that GMO [genetically modified organisms] food, because they are not sure about it. But the United States, Canada, and Argentina have run headlong into the GMO food game, and are trying to put pressure on the other countries to follow suit, and we'll see what happens there, in the WTO processes.

On the other side, from the producers' standpoint, the cost factor: Just to give you a reference point, we used to pay \$20-30 per bag, for a 50-pound bag of planting seed of cotton. Nowadays, if you buy bio-technology, your minimum cost or price is about \$150 per bag, on up to \$400. And yet the price for the cotton, the finished lint in the field, is still \$.50 a pound. There's very little yield increase. So, you can see the disconnect at that point right there. And that's causing a lot of our producers concern. More especially in the dryland areas like where I grew up, where we don't have irrigation to supplement the rainfall, you're not guaranteed any production, but

FIGURE 3

Significant Drop in Water Level in the Ogallala (High Plains) Aquifer, South to Northward, from 1930s/50s to 2000



The rock formation of the Ogallala, spanning an 111-million-acre area (173,000 square miles), in parts of eight states (Texas, New Mexico, Oklahoma, Kansas, Colorado, Nebraska, South Dakota, and Wyoming), consists of semi-consolidated sand and gravel, from alluvial deposits.

The toned patterns indicate how far the underground water level has fallen, or risen, as of 2000, from the period of earliest measurement available, before extensive ground-water pumping began (termed “predevelopment”). Darkest tones in the southern part, indicate a water level drop of more than 150 feet. (These are red tones in the original USGS color map). The darkened tones in the north (blue in the color map) indicate localized areas of rise in water table.

The earliest dates of measurement—“predevelopment”—vary by locality, from certain years in the 1930s, up through later decades. The median year for earliest measurement is 1957, out of the total of 20,000 wells over the whole area. The pattern clearly shows that the southern part of the aquifer, in West Texas, has experienced the sharpest drop in water level.

The capital letters refer to selected well sites where the Geological Survey provided hydrographs in its 2003 report, of the history of water level measurements at that location. The hydrograph for “E” is shown in Figure 4.

The 2003 report by the Geological Survey summarizes the situation:

“The average area-weighted water-level change in the High Plains aquifer from predevelopment [prior to extensive pumping] to 2000 was a decline of 11.9 feet. The average area-weighted water-level change by State ranged from almost no change in Nebraska, South Dakota, and Wyoming, to a decline of about 35 feet in Texas. The area within each State with 25 or more feet of water-level decline ranges from small areas in South Dakota and Wyoming, to about 9 million acres in Texas.”

Source: “Water in Storage and Approaches to Ground-Water Management, High Plains Aquifer, 2000,” U.S. Geological Survey, 2003

yet you’re guaranteed a *high cost of production*—so, that makes for a potentially volatile situation.

EIR: What about the fact that you might be going to very few suppliers, and have fewer conventional seeds and suppliers?

Barron: We have what we call “custom cotton seeding delinting plants,” in West Texas and other parts of the United States. We don’t have near the amount we had 10 or 15 years ago. Right here in the immediate West Texas area, 20 years ago we had 25 custom delinting plants, where they delint the cotton seed, rebag it, and have it for replanting for the following season, which is an age-old practice of farmers worldwide: saving some of their seed from one crop to plant their next crop.

But, with the new genetically modified seed, that doesn’t happen. You have to purchase brand new seed, different stock every year, and you can’t save any of your current seed, for

fear of getting sued by Monsanto, or whoever the company may be that has patent rights on that product, and that’s actually taken place some, unfortunately, in the last several years.

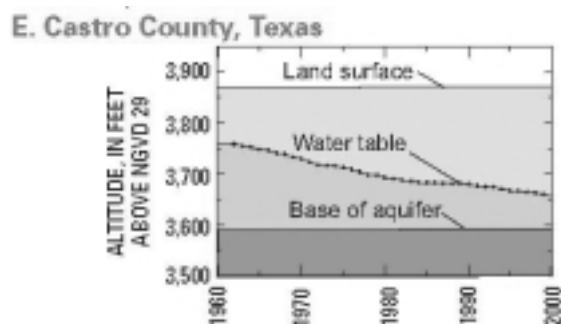
EIR: So, in other words, in past decades, you had a whole complex of a kind of redundancy in different cotton regions of the country, but especially yours, so, it wasn’t all dependent on one source. What about other commodities in this regard?

Barron: It’s about the same game, best I can tell. Every week on my two-hour radio address on Saturday, I get corn and soybean producers from the Midwest and other parts of the country to climb aboard with us, and talk about their situations and their thoughts. They parallel very much: They have concerns about this rapid consolidation and merger process with the pharmaceutical companies, which spills over to the domestic Monsantos, the chemical and seed companies—they’re all going together. What I hear lately is, instead of

FIGURE 4

Hydrograph in Castro County, West Texas

(Exact location shown in Figure 3)



Source: U.S. Geological Survey, 2003

The “base of the aquifer” refers to the estimated level of impermeable rock at the floor of the aquifer. The water level has fallen more than 100 feet from 1960 to 2000, at this site in the northwestern part of Castro County, south of Lubbock, in the region where rancher Lee Barron reports that irrigated agriculture had to stop.

having six major chemical companies like we have today, whereas we had 12 just a few years back, we’re going to get down to just two or three major suppliers. At that point in time, there’s a very big fear about where the cost may go, and maybe the availability, and who knows, the safety factor to all of us from a food consumption standpoint.

EIR: So that would be Monsanto, and Dow—which bought Pioneer Hi-Bred, and very few others.

Stepping back from that, how do you see the combined impact of the various economic downshifts imposed under globalization? Your Texas Panhandle is in the southern part of the High Plains region, and if you look county-by-county—*EIR* has done map animations of this—you see a dramatic *depopulation* throughout this whole multi-state belt.

It’s parallel with the takedown of the industrial regions, of the steel belt, Pittsburgh, Cleveland, Detroit—that kind of thing.

Starting from the Dakotas and going south, most counties have seen an exodus. The young people seek work elsewhere. The towns are boarded up. The average age of farmers left on the land is going up.

Barron: Well, just to put it simply, draw the bottom line: I’m 48 years old, and I rent out my farms in two counties. My goal, going to college back in the late ’70s, was to be a full-time cotton producer in West Texas. I’m not doing that today, mainly because of the lack of good, sound economics at that point. And most of my friends whom I graduated high school with, and went through college with, who went into “production ag” in the early ’80s, I’d say about 90% of them have now busted out, are bankrupted out of farming, and are doing

things elsewhere.

And in my travels in West Texas—I’ve travelled to all the cities and all the counties for going on 20 years—I’ve watched a rapid decline in the population of those small towns. I’ve seen a downsizing of the school population and a lowering of classification in athletics; churches closed; and just as you mentioned, a forced movement out of the country into town, due to low prices and high costs. And it’s still taking place today. And we’re moving production ag into Brazil, Venezuela, Argentina, China, and other regions outside the United States, and we’re pointed in a not-so-pretty direction.

EIR: Let’s go back in time. In the 1960s, there was a lot of discussion—and that was a turning point—about the question of infrastructure, water supplies, and climate. As of that time, the United States still had its Office of Saline Water, working on water desalination; I think it was in New Mexico or Arizona. They were looking at the potential—even earlier in the Atoms for Peace period—looking at setting up nuclear-powered desalination on the Gulf of Mexico and on the Pacific Coast.

There were the plans before Congress to have interbasin transfers of water, and move river water southward—even to Texas, from the Great North American Water Alliance. This would be diversion of some of the flow to the Arctic in the Mackenzie River in northern Canada. A grand plan to bring it way south.

Do you recall this, or the nuclear-powered desalination, or any other projects then? What has been any rearguard support over time? (**Figure 7**)

Barron: Oh, there’s still talk from time to time, that the future water supply is out in the ocean, to bring it in and utilize it thataway. And even utilizing the floodwater, and cleaning it up enough to utilize for irrigation, and maybe human drinking water and consumption at that point.

EIR: Recycle it?

Barron: Through its recycling, basically. But I don’t know—at that point, the true bottom line I guess, for myself and those farmers that I talk to, is that we need an increase in the price being paid for our commodities, of corn, wheat, milo, cotton, major row crops across this country, to get subsidized to an extent by the U.S. government, in the current farm bill. Because we all know the Bush Administration and the current, not this administration, but meaning the past, have cut farm programs; and now Bush is threatening to cut farm programs once again, and that’s probably where 50% of the income that comes to farmers nowadays is, through that government process. We’re barely paying bills with these high costs like it is, so if that gets cut, that’s a real, major fear factor at that point.

But, myself and most producers would rather not have this government help, these government subsidized payments: We’d rather just have a fair price in the marketplace for the product and be like most other businesses, where we

could obtain a parity price, a fair price for production, that would cover that cost of production, plus just a little profit. And domestically have our food and fiber system more at home, and let other countries do the same in their country, and then trade with these other countries, as would be fair for both parties and beneficial, and make sense.

But we're not doing that today, with these unfair trade agreements that they're trying to ram through, and unfortunately are getting done, like NAFTA and CAFTA; and who knows about FTAA, and then on to the WTO. It's making for a bad situation.

And unfortunately, if we let our food and fiber production be almost dominated by outside forces and producing elsewhere for shipment back to the United States, who knows? They don't *have* to send us the food, number 1, our availability could be suspect; number 2, who knows what the price might be?

EIR: And the drumbeat is even worse now to continue more of so-called free trade, when it's clearly a disaster. We are seeing this especially being promoted back here in Washington, D.C., but also through the national media, by this false friendly coalition between the ultra-right-wing, like Grover Norquist, of the anti-taxpaying league, and Bono, and others, who say, "Well, we're right and left coming together, because there should be *no* support, no price subsidies, no, programs for U.S. farmers," because it isn't fair to the Third World. "We have to allow Third World nations to have access with no limitations, to sell their products in the United States."

What do you say to that?

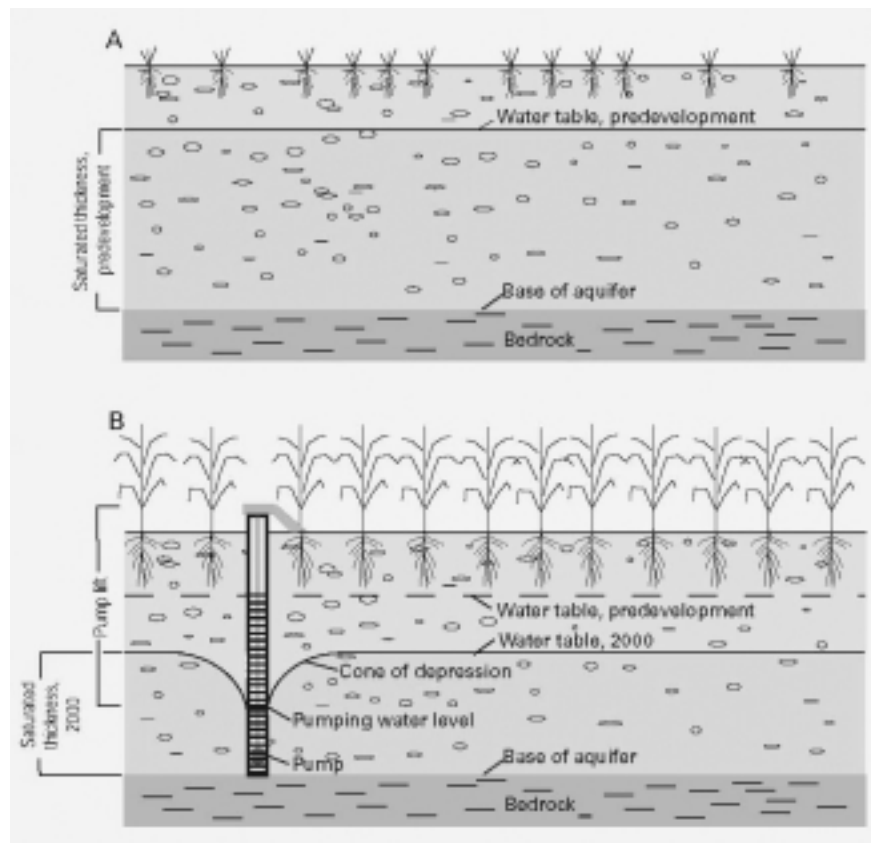
Barron: We have some bumper stickers we produced about six months ago, and I carry with me and pass out to farmers on a daily basis to promote my radio program. And they're white vinyl stickers with red letters that say, "NAFTA + CAFTA = Shafta. Buy American made. Call your Congressman immediately." That's pretty much how we feel about the trade agreements in West Texas.

EIR: What else needs to be said?

Barron: I guess the basis of our mission and my small com-

FIGURE 5

Irrigation Pumping Costs Soar From Declining Water Levels, Rising Energy Prices



Source: U.S. Geological Survey, 2003

The diagram shows the water table and saturated thickness of the aquifer, during (A) predevelopment (before extensive pumping); and (B) after the water level has fallen, in 2000. The costs of pumping for irrigation have risen sharply both from hyperinflated energy prices (see **Figure 6**), and from the fact that energy requirements are more than one-to-one proportional to increasing the water lift distance. Energy costs also increase because well yields decline as saturated thickness declines, and pump operation time must increase. Many other characteristics of the aquifer can figure into the calculation (for example, the radius of the cone of depression can change), as well as the relative efficiency of the pumps used.

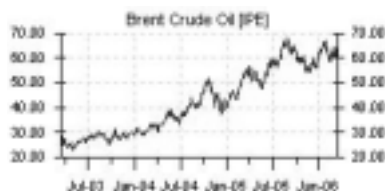
pany in Lubbock, Texas, is to promote agriculture and broadcast about the industry: I went through FFA in high school—

EIR: Future Farmers of America, it was called then, before they changed it to FFA.

Barron: And then, we have the 4H, which are the younger kiddos. My boys are currently involved in 4H, and we go to stock shows and show pigs. Those youth, from ages 8 to 19, a lot of them have a dream of coming on up and entering production agriculture, and becoming a farmer/rancher in the United States. But, that dream is fading quickly in my estimation, due to the greed factor of multinational corporations that are moving production out of this country, and

FIGURE 6

Hyperinflation of Price of Oil (Brent Crude), from July 2003 to January 2006, Per Barrel



Source: www.thefinancials.com

As the price of oil per barrel rose from the range of \$25 in mid-2003, up to \$63 in January, 2006, rising energy costs of all kinds—natural gas, propane, gasoline, electricity—have slammed agriculture operations.

making their dream fainter and fainter every day, that there should be a concern for our kiddos and grandkids in future generations. And that should be a criminal act that needs to be really looked at closer.

But unfortunately, the multinationals seem to be plenty good enough campaign contributors to our elected officials to keep their heads turned, and thoughts away from things like that.

It's a very frightening situation to me, one that ought to be addressed immediately. I think more mothers, fathers, grandmothers, grandfathers, and consumers, if they *really* understood better what's at stake here with our food supply, and the safety thereof, most consumers would be up in arms, and marching in the streets today. But unfortunately, they do not know, the consumer never has known for sure where the food's coming from. They've been kept kind of in the dark, about the American ag system, and the value of America's farmers and ranchers. Therefore, we don't have the support in the cities, from the 99% of the population off the farms, which we need. *But*, on the other hand, that's what my company's all about, and we're trying to run ads on television nationwide, as we speak, with some notable people, like Bobby Knight, Wilford Brimley, Red Steagall, and others that we run across that can be strong carriers of the message of the value of American agriculture. At that point, we're hoping to rally just a little bit of support among what we call our "city cousins."

EIR: Good. Well, a lot of people, city or country, didn't even think where their bridges came from—

Barron: Or, ports!

EIR: Or, ports came from, or where the levees came from. So, if we make clear where all of this comes from, namely, real, physical economy. I think we have a chance.

Barron: Well, I hope so, Marcia. I tell you what, we've got one heck of a fight going!

EIR March 31, 2006

FIGURE 7

Nuclear Desalination Can Manufacture Vast, New Water Resources



Source: "Seawater Desalination Plant for Southern California," Metropolitan Water District of Southern California, Preliminary Design Report No. 1084, October 1993.

An artist's depiction of a modern seawater desalination tower, proposed for a site on the California coast. The structure houses a multi-effect distillation process (vertically stacked evaporation) for large-scale output (284,000 cubic meters daily). Multiple desal plants along the Gulf of Mexico and Pacific coastlines, plus at inland sites to desalt brackish water, would create vast new quantities of man-made, "natural" water resources in this arid region. Cheap, plentiful electricity is the pre-condition.

The installation shown here is intended for use with the new fourth-generation nuclear design by General Atomics (see p. 42). It was part of their proposal, "MHTGR Desalination for Southern California" (December 1988). Desalting plants supplying 1 million cubic meters a day—say, four of these towers—could supply an urban concentration of 4 million people with sufficient water for domestic use; or the equivalent volume for other purposes.

The water graphics used here were selected directly, or adapted from, illustrations of the U.S. Geological Survey, by Cody Jones, Drew Langsner, Joe Smalley, and Aaron Yule.