A Rancher's Perspective: Healthy Watersheds— Layered Investments

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Stephen L. Wilmeth is a rancher from southern New Mexico and is a native son of the state. His family arrived in Grant County commencing in 1880 with arrivals continuing in 1884, 1888, and 1900. He earned a BA from Western New Mexico University and a graduate degree in agricultural economics from New Mexico State University.

From 1981 until 1999 Stephen farmed in California's San Joaquin Valley. The farming company he founded, Met West Agribusiness (MWA), had a portfolio of nearly 14,000 acres of permanent crops when he left California. The major emphasis was grapes that were spread to several major wineries including Canandaigua, Gallo, Beringer, and Korbel. MWA was the largest apple producer in California with nearly 2,300 acres of trees. Granny Smith apples were the major focus, and, if a resident in the states of Arizona, New Mexico, or Texas ate a Granny Smith out of a grocery store in the '90s, chances are it was a MWA grown apple. MWA was also among the 20 largest producers of nuts (almonds) and stonefruit. In 1996, the company was ranked as the fourth largest fruit company in the United States.

Stephen has farmed in 15 different water districts in California, two in New Mexico, and one in Arizona. Water costs varied from \$22 per acre-foot in Kern County's districts to \$395 per acre-foot in that county's Maricopa-Wheeler Ridge Irrigation District in California. The district ownerships varied from private to state and federal. Water was sourced variously from riparian flow to deep wells and from local sources to California's extensive state and federal infrastructure. Most districts had surface storage although several depended on aquifer banking and sourcing. Water usage varied from in excess of 10 acre-feet of use in flood irrigated rice to 24-acre inches of use in dripped vineyards. His underground drip experience has been in nuts.

Today, Stephen ranches between Las Cruces and Deming, New Mexico. He is a board member of the Doña Ana Soil and Water Conservation District and a founding member of the Council of Border Conservation Districts.

Ood afternoon. Thank you, moderator Julie Maitland, conference participants, New Mexico leadership, and invited guests. It is distinct honor for this rancher to be included in the matter of New Mexico water management and the realities of our water resources. I suspect it might have been awhile since a rancher was in the midst of this esteemed group of water experts. I appreciate your invitation and it is my intention to offer a glimpse of our water resources from a very fundamental position. That will come from my shadow across the lands of which I have had the privilege of stewardship.

Ranching colleague Don Thompson once told me that "there is not a land anywhere that expects less and gives more than New Mexico." His words ring truer each and every year. New Mexico, last among all states as a percentage of actual surface water to total area, is a land inhabited by a citizenry that can be as inventive and creative as any other in the entire world.

Much of my professional career was spent in California's San Joaquin Valley. I formed Met West Agribusiness with Metropolitan Life Insurance Company and that management company farmed Met Life investment properties from Sacramento south to Kern County and the foot of the Tehachapis. Of the nearly 13,000 acres of permanent crops we farmed, we dealt with water that ranged in charges from \$18.50 per acre-foot for shallow lift costs to just under \$300 per acre-foot for emergency aqueduct water. Certainly, we preferred the former over the latter, but we made both extremes work. Free and independent men have an amazing capacity to overcome constraints.

New Mexico has no magic Lake Shasta nor does it have the amazing watershed of the Sierra Nevada, but we do have our versions. We must consider ourselves lucky to have what we have.

The players

Many times I was asked by California colleagues where the best farmers in the world exist. My response was—West Texas cotton farmers. My rationale was that, in order to be successful in West Texas, a farmer had to be better than good. Pumped water, weather risks, and the nature of the commodity they farmed forced them to be darned good or they were—failed managers.

If I were asked that same question today, my answer might be different. My answer would be that best managers are those farmers who are successful growing any federal program crop. My whole view has changed dramatically since I have returned home to New Mexico and now deal with various farm programs. As a beef producer, I don't have direct subsidies, but I do have federal program involvement with drought and cost-share investment programs. I don't like them.

Having dealt with commodities that don't have federal regulatory demands, I think farmers who have to deal with federal programs put themselves at great risk. They become dependent on a system and less nimble to deal with all fluctuations, not the least of which is the market. They lose the ability to maintain what I refer to as stepwise or layered investments.

I'll submit to you that those leaders who conceptualized and carried out the construction of Elephant Butte Reservoir would understand my position. Who, in 1898, could possibly envision the extent of wonders of what impounded and managed distribution of that project would do to the Hatch and Mesilla Valleys? Who could have envisioned the benefit to this state? One reality of the continuing benefit would be the actual footprint of Las Cruces and all other towns south of the Butte. Without Elephant Butte Reservoir, annual flooding would disallow a greater proportion of the current growth patterns of those towns.

Now we gather at this conference and similar forums to discuss future water management. Most of the discussion centers on conservation rather than resource enhancement. Conservation in itself is not bad. In fact, it is a great motivator as long as the steward is free to act upon constraints as they apply to him personally. Examples are widespread. The technology of nut and grape mechanical harvesting are examples of how free

and independent men, faced with blistering constraints, figured out revolutionary methods to dispense with overwhelming labor constraints.

Drip irrigation is a better example for today's discussion. When I first visited Howard Wertz and Scott Tollefson in Arizona in 1981 and observed what they were doing in underground dripped cotton, I knew where the future of western farming, in general, was going.

The same impact of benefits from irrigation technologies, such as that of the Israeli Netafim, altered my personal awareness and corporate investment strategies. We first immersed ourselves with more sophistication and higher costs and then with less sophistication and learned practicality. We adapted high levels of sophistication with practical farmer experience to form a more perfect operational and economic union. When our property portfolio was sold at the turn of the century as the consistently fifth largest fruit company in America, we were farming nearly 10,000 acres of drip-irrigated permanent crops. The rest was still dedicated to flood irrigation, but that land also would have been converted in a short time horizon.

But ultimately, without resource enhancement, conservation alone, whether it is tied to crop programs or water sources, is a one-way ticket to past glory. Congress agreed with that over a half century ago. In 1955, a Senate Select Committee on Water Resources predicted that without importations, the West would be out of water by 1980. Agricultural efficiency has improved more than it is given credit for, but more must be done to secure the next generation's water supply. That is where New Mexico, generally, finds itself. It is time to enhance the resource base.

Enhancing the resource base: the tale of two alternatives

Before I return to my beef operation, I'll submit two concepts for resource enhancement of merit that must be pursued in southern New Mexico. The first is water banking. Water banking works and it works exceedingly well where free and independent men are allowed to act.

To those of you who are familiar with California's Kern County's Lost Hills or the Arvin Edison Irrigation District, you might have some knowledge of the significance of water banking.

Where the water comes from and how it is transported is certainly a complicated matter and won't be debated today. But an adequate system must be set in motion and unless the leadership is content to remain at the helm of a declining system. That has no place in a society that is truly intent on maintaining and enhancing generation to generation productivity.

Subterranean water banking is critical. It is environmentally friendly, and it is relatively inexpensive compared to surface banking and permitting. Alternative number one—Water Banking! We must do it and we must pursue it with gusto.

The second alternative in my world and on the minds of my colleagues and fellow board members of the Doña Ana Soil and Water Conservation District is something out of the ordinary. Many of you have heard that Doña Ana County is the future site of the largest inland port in the world. That is no longer a dream. It is a reality under construction. The Port of Santa Teresa is being built!

With that port is a rail right-of-way and future link from the Port of Guaymus on the Sea of Cortez in Mexico. Our concept is to marry the right-of-way across northern Mexico to the Port of Santa Teresa with a pipeline connection, not to a temporal source of future water, but to an ocean of permanent water. One of our board members, John Smith, prepared a white paper for Harry Reid when Commander Smith was the executive director of the Range Commanders Council at White Sands Missile Range. The thrust of the proposal took similar Sea of Cortez water from Mexico, distilled it through a series of parallel nuclear driven desalinization plants at two locations across the international boundary and pumped it north. That water, estimated at 600 million gallons per day would ultimately serve as the primary source of potable water for the Las Vegas metropolitan area.

Our concept proposes to pump ocean water into Doña Ana County within the established port right-of-way and use the 300° F heat source at a depth of 12,000 feet under every square foot of Doña Ana County to provide the safe heat source for the desalinization process. The byproduct, salt, would be stored in the saline water deposits at similar depths. The water, too expensive for agricultural use, would become a primary future

water source for potable water demand in the Rio Grande corridor.

Can't do it, you grouse? Such a reminder should only be posed to the conceptual pioneers of Elephant Butte Reservoir in 1895 or visionary leaders who conceptualized the Owens Valley, Central Valley Project, or the Central Arizona Project 35 years before their inception. Free and independent men can do truly amazing and productive things—if they are allowed to act.

Meanwhile, back at the ranch

As a rancher, I am within the ranks of an endangered societal species that, collectively, is a most important ally to water conservation in New Mexico's future. I'll tell you why.

In an arid setting and regardless of where it is, the most important conservation action of stewards is to 'minimize runoff and to maximize retention' of the moisture that falls on the landscape. Nobody is more important to that task than the ranching community in this state. And, yet, nobody is more assailed, minimized, and misunderstood than this segment of our citizenry. I am not seeking sympathy. I don't want sympathy. I simply want the leadership to recognize how vulnerable our lands are if stewards of that land—engaged stewards tied to these lands with the risk of financial failure—are displaced.

Figure 1 is a picture of one of my pastures post monsoonal 2013. That pasture had a monsoonal accumulation of 1.75 inches in 2011 and 1.25 inches in 2012. In 2013, it got about 7.5 inches. The picture paints the case of underlying system health that rebounded when adequate rainfall again fell on this land. Seventy percent of this ranch is now cattle free during the monsoons. I drive a pickup with 350,000 miles on it and I work in pens that are less than efficient, but I ride pretty good horses and I have water in these pastures that allows me to concentrate cattle and when rainfall does fall, I can rest that 70 percent land. We have capitalized water to the detriment of everything except the health of the land, but this picture demonstrates, not past glory, but engaged 2013 management.

"Minimize runoff and maximize retention" is the continuing theme of utmost importance to our landscape. The rest of my story should be reserved for another discussion, but the point must be made. These ranch lands are vital to the



Figure 1. Pasture post monsoonal 2013

system health of our land. Good ranchers are not born—they are made, and they can and are being destroyed. Past glory is no longer an option for our watershed system. Future glory is what we must strive to achieve, and it starts right here, right now, with leaders who don't have biased blinders.

Thank you very much and thank you, God, for the bounty and the resilience of our New Mexico lands! Author's note: If there isn't a copyright pending on 'minimize runoff and maximize retention', I would propose it be assigned to the ranching community of New Mexico. Those folks understand the concept from their shadow on the ground—to a better vision for our future.—Stephen L. Wilmeth, southern New Mexico rancher