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CALIFORNIA SUCCESS STORIES IN AGRICULTURAL WATER USE: SIERRA ORCHARDS

Extended Interview with Craig McNamara, Sierra Orchards, Winters, California

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During a June 2009 visit, Craig McNamara discussed irrigation and conservation programs on his farm with Pacific Institute researchers:

When we made that change to drip it really made a significant water savings.

No, I wouldn't say it's a cost savings at all. I couldn't make that comparison because furrow is very, very cheap in terms of tractor pulling a blade that makes the furrow. If you're pumping from a shallow area, the cost in electricity is a factor, but not so significant.

Your drip, of course, your up-front cost is about \$1000 per acre. You've got an up-front cost there, and hopefully, over time rapidly you'll recoup that in electrical savings, water savings, and productivity. And we're very fortunate to partner with NRCS in EQIP Funding, and that provided approximately 50% of our overall cost to install our irrigation system. And I just want to say that the EQIP process, of registering and working with NRCS, is quite a remarkable one because I find that our local team here from NRCS is so proactive in assisting the farmer, encouraging the farmer to look at his or her operation and find out what project might work best for them and customize it. They as a team come out and assist me, in giving me information, providing background, as well as assisting in forming the application. Sometimes the application process can be initially daunting; it doesn't need to be because of the teamwork and assistance.

But for me personally, and I think each farmer will be different, as I mentioned, I didn't come from a farm background. I needed help. I needed all the help that I could possibly get when I finished up my mentoring project, and so I relied on Cooperative Extension; I relied on farm advisors, I talked to my local farmer friends. This was a natural for me – and that was 30 years ago. So we've done it ever since, and I think that many of my friends locally and in this region have found the experience to be very rewarding. Natural Resource Conservation Services are

part of the USDA, United States Department of Food and Agriculture; it's our tax payer money and it's the best use that we can possibly expect. As a tax-payer, it's the best thing I think my taxes can go towards: it's the long-term conservation of our food supply.

There's a very specific program. As a matter of fact, I just heard last week that one of our grants was approved by NRCS through the EQIP program to grow the cover crops I mentioned that help us fertilize our food. What a great way to go. Let me backtrack a second. Synthetic fertilizers give us a tremendous boost in production, whether it's corn, soybeans, walnuts, tomatoes, whatever it is. They are an important global tool for high yields in production. We need to use them carefully. Anything we put on this great soil of ours, as I showed from the sediment trap, that wonderful, yellow, fine sandy loam, can eventually go through it and down into our aquifers.

Unfortunately, in California over the last 50 years we've had quite a bit of contamination due to nitrogen application. So why not reduce them, those of us, those of the farmers who use ammonium sulfate, and other synthetics, be mindful of that. Test your soil. Test your water. Those of us who are growing organically can use the leguminous plants. That's what this recent EQIP loan did with us, was to offer us a break or incentive to grow more cover crops.

Conservation Security Program, CSP, has been perhaps one of the most rewarding programs in my three decades of farming. The reason is, we went out and did what we felt was right for the land, for the environment, for our neighbors, for our downstream users in California, by putting in sediment traps, tailwater ponds, removing invasive species, planting the hedgerows that we see here to create habitat for beneficial insects. We did that because we felt it was the right thing to do. And it cost; it cost us money. Over the 30-year period I bet it has probably cost \$80-100,000 to do that appropriately. A few years back the CSP program came along and, through a very stringent application and recording process, prioritized farms and farmers in certain watersheds that were doing these beneficial stewardship projects on our land and in essence rewarded us with payments over a three-year period.

And so, number one, it was an acknowledgement that the practices that we've been implementing are appreciated by the citizens of the United States, and hopefully beneficial to one and all, and secondly, actually providing us with a financial incentive to do what we have been doing. It was remarkable. It's like an award, a recognition for something that we truly believe in. I don't think that we as a society of farmers who are frequently so strapped when it comes to the bottom line, can do it on our own. Yet the citizens of this great country need us, not just to produce food, but to insure, in the 2000 years that agriculture has been with us, or 8000 years, that we can continue to farm into the future. And this is the only way. If we are not mindful and good stewards of our water, our air, and our land, quite frankly, we just won't have it. And we will be, I guarantee you, we will be dependent on food coming from foreign countries. I am not an isolationist, I am a global partner, but I think we should be self-sufficient in our food production.

For the CSP there are only certain watersheds across the country that were able to be funded. So that's the key here. Funding is lacking. We need to increase funding across the United States for farmers to enter these programs. I would say it's because we are facing such critical competing

demands in California. I mentioned the water system. We're facing the worst drought in California history, at a time when our population over the last 40 years has grown by 15 million people and it's predicted in the next 15 years that we'll reach 50 million people. And at a time when we are basically disconnected from nature, from our food systems. So it's an extremely important time that we as Californians support one another in food production, in conservation, and in working with our government officials, both statewide and federal, to ensure that conservation programs like EQIP, like Conservation Security Program, continue funding during this extremely dire time.

I mean, California, as we know, is facing a \$24 billion shortfall, right now. That's not looking at the next fiscal year. So it might seem odd that I'm out really staunchly advocating more conservation programs, but I think it is critical to the well-being of this industry that we used to say was the most important industry in California. And let me remind us that California is such as the fourth or fifth largest agricultural economy in the world. So it's extremely important that we maintain this vital resource not just for us as Californians but for the rest of the United States. We do provide over 50% of the produce and fresh vegetables that the rest of our citizens enjoy, and that in itself is very important.