

Agricultural Water Stewardship: Looking Forward through the Rear-view Mirror

by Gary Black

Good morning. Ladies and gentlemen, it's a pleasure to be here. I will stick to my time. Usually brevity is one's ally in this business and I intend to keep it that way. I'm pleased to be able to speak on behalf of agriculture. Some of the things that, if you're in the line of work that I'm in – and I've been at the Council for 19 years - sometimes get identified as a special interest. Folks, anything that we're all passionate about is not going to be a special interest. Agriculture is a special interest to me. We have a deep passion about environmental stewardship as well.

Enhancing the business of agriculture, through education, economic and environmental stewardship has been the key point of our mission statement at the Council since its founding in 1966. I wanted you all to see our organizational objectives and how we're actively involved in the legislative and regulatory arena. We do provide a number of economic services to our members and have been successful in that. We promote leadership development through a number of programs in our industry. We're also passionate about building coalitions. And that's not only in our agricultural community, though I've said if you have forty pecan farmers in a room, you've generally got about eighty opinions. We have some trouble sometimes, even within our own family, building coalitions, but reaching out across other business sectors and interest groups is certainly something we want to do. We're very passionate about young people too, providing them with educational opportunities and experiences. As the average age of the farmer continues to increase, we've got to return young people into production. We need to move young people into this industry to feed and clothe our nation and the world.

Water – a corporate responsibility for a resource in peril. Ladies and gentlemen, the time has come; we absolutely must assess the resources in the land, the conservation problems, and the opportunities that we're facing. We absolutely must draw upon various sciences and disciplines and integrate all the contributions into a plan for the whole property. We absolutely must work closely with land users so that the plans for conservation mesh with their objectives. And we absolutely must, through implementing conservation in individual properties, contribute to the overall quality of life in the watershed of the region. Is there anybody here who doesn't agree with that?

We in agriculture agree with that – as a matter of fact, these are the founding principles of the Soil Conservation Act of 1935. Conservation and environmental stewardship – let's break away from what we sometimes see in the media - it's absolutely been a core principle in agriculture for a long time. Folks have been concerned about the land that they live on, concerned about the water they use, long before it was cool to do so. And it's been a delight to

be able to work in this environment for a long, long time.

What I want to do today is raise the question “are best practices good enough?” What I’d like to be able to do is to convince you that through the rapid adoption of technology, the folks that I serve continue to be good managers of the resource. Are we ever going to declare “we have arrived?” No, because there are greater opportunities, technological developments, on the horizon, all the time. Let’s take a look at a few examples..

Irrigation is vital to production agriculture in Georgia. Agriculture is, from the production standpoint, about an \$11 billion industry in Georgia; from a value added input we get up to about \$55 billion. But having access to and being good stewards of the resource is so very important. What are we doing now? What are the best practices? We’re rapidly adopting global positioning system technology in all facets of agriculture. Whether it’s variable rate application of fertilizers, or real-time management of center pivot irrigation systems, efficiency is the goal. We’re experiencing rapid advancement in soil moisture telemetry meshed with center pivots so that the plants are actually receiving what they need. It’s not just the broadcast approach, which was the best technology we had 30 years ago. But today we’re rapidly adopting new methods driven by stewardship and economics.

I want to stop here for a just a moment. One irrigation system is a device called an end gun. It covers a wide range on the circumference of a field. How many of you have seen applications going into a ditch, or unfortunately, on the road? That’s not a good thing. One of the best successes in recent years involves the Georgia Soil and Water Conservation Commission’s program to retrofit and work with producers to cost share the installation of GPS guidance on systems. Reading the mapping coordinates, the systems simply shuts off at the proper place saving water, thus improving stewardship. One of my Bulloch County members reports a two million gallon annual savings on one field with the installation of this technology. We must continue to embrace, as we always have, these new tools and a new generation of solutions.

One of the first speakers talked about the relationship between energy policy and water policy. We’re actually seeing a little bit of that in agriculture now, because with the elevated price of petroleum. We’re seeing some irrigation systems converting to electricity. But just the cost of operating a system is a major management consideration now. And so, even in traditional row crop agriculture, deep root drip irrigations systems are becoming economically viable. Now what’s the glide path for this? I can’t tell you it’s three years, five years, ten years, but I can tell you that producers of our very important cotton crop have it under consideration. Research funding will flow in this direction. If it becomes economically viable and proves to be a good management stewardship decision, farmers will adopt the practice. These are just some of the tools on the horizon that will affect water quantity and use.

When we look at the next question on the issue of water quality, are best practices good enough here? We're making rapid advancements in the livestock industry. Here's a before and after example of what should be the poster child of what to do in a particular situation where folks have livestock. Twelve years ago I fenced my cattle from streams on my property through the 1996 Farm Bill's Environmental Quality Incentive Program cost share project. These kinds of practices are being adopted throughout Georgia where applicable. When we look at wetlands fencing, that's what I was just talking about. Bobby Miller's farm in Hall County is a great example. Removing animals from that habitat where we've just had free range through woods and creeks, and establishing controlled grazing paddocks, is certainly a practice that is improving water quality.

Strip cropping systems. You see a little more of this practice as we move out of the southeast, not as much in Georgia, but certainly across American agriculture. It's very important for reducing wind and water erosion.

I see a great need in Georgia for increased adoption of grass waterways, in between irrigation systems, in between crops. In heavy drainage areas grassed waterways reduce runoff and erosion. The practice is certainly not new, but still should be installed in many areas.

Lastly under water quality, a practice that I still believe holds bright promise is conservation tillage. Conservation tillage technology is, again, nothing new. It's not applicable in every particular situation, but where it is, we need to adopt it. Conservation tillage builds organic matter in the soil; it certainly reduces runoff, and improves the utilization of the water that's actually within the subsoil. In Georgia, we have 900,000 acres of cotton. Fifty percent of that cotton is irrigated, and about forty percent of our cotton now is in conservation tillage. In many places, we'll see that go up. We'll never be 100%, though that is a good goal to shoot for. In peanuts – a very important crop in Georgia, as well – we have about 650,000 acres. About 50% of that crop is irrigated, and 30% is in conservation tillage now. I think we'll continue to see more and more the advantages in using this technology in the future.

The final area relates to matters of state and federal policy. The water withdrawal permits in agriculture in the state of Georgia - 21,000 of them, give or take a few. What are the best practices and are these good enough in state and federal policy? I suggest again, in the state of Georgia, we've made great rapid improvement. And we'll continue. We look forward to working with Gale [Cowie] and her team as we implement this statewide water plan in Georgia. I'm still looking for a lot of good things to come from it. We (GAC) were a significant partner in working with members of the legislature to pass legislation several years ago requiring irrigation meters on every irrigation system in the state of Georgia by July 1, 2009. The state Soil and Water Conservation Commission and our University of Georgia colleagues are rapidly on their way to completing this task, and I have good assurance that they'll meet that deadline. As someone who's been in agriculture his entire

life, I'll be the first to admit that rejecting metering when the permit law passed in 1986 was the worst decision ever made by the agriculture community. We would have been much better with data. Extrapolated data is useless, but real data will be our friend at the end of the day. The meter program has been very positive, and I think producers will be delighted when this is fully implemented.

I'm a real champion for Georgia's audit and retrofit programs that are conducted by the Soil and Water Conservation Commission. Mr. Lee Crumley's farm, that I mentioned just a moment ago, achieved the 2 million gallon savings thanks to the audit program. He learned quickly that converting to low pressure nozzles, replacing worn parts, and installing an end-gun shut off makes a huge difference. And we've got to make sure in the future that state and federal resources that support these programs are used to the fullest extent. The federal Farm Bill gets a lot of criticism. After months and months of debate, I can tell you the new version is the greenest farm bill yet. It is the most conservation oriented farm bill that this country has ever seen. Some of our friends in the media will state that farm bill subsidies only go to the big farmers. Only 11 percent of the farm bill actually goes to farmers through commodity programs. Another 8 percent of this farm bill funds conservation. A full 73% of the bill underwrites social programs through food stamps. In the face of critics, I still say the importance of having a strong federal farm policy – one that supports conservation and other agricultural programs - is still as important a component of national security as anything that we have. Education is still key.

Lastly, I believe that working in partnership with federal and state government – and in some cases even local government - is vital to the management and protection of our natural resources. But when regulations or practices demand results in the public's benefit, I think there is a public responsibility to help pay the bill.

To sum up, are our good practices good enough? No, because we've not arrived. But I can tell you that the folks that I'm happy to work for have rapidly adopted, and will always be in that mode, and I hope that we can only see bright days ahead as we become even better stewards of this precious resource. There was a presidential commission on country life instituted by a president mentioned this morning. One hundred years ago, under the great presidency of Theodore Roosevelt, the Commission on Country Life did work of capital importance. A newspaper reporter wrote, "By means of a widely circulated set of questions, the Commission informed itself upon the status of country life throughout the nation." Now a number of questions were asked, but there was one particular 52-year old farmer from Missouri that had 11 kids, who, when he and his wife were interviewed, responded in frankness to the following questions: "Are the sanitary conditions on the farms in your neighborhood satisfactory?" And he answers, "No, too careless about chicken yards, too careless about chicken yards and the like, and poorly covered wells. In one well on a neighbor's farm, I counted seven snakes in the

wall of the well. And they used the water daily. His wife's dead now, and he's looking for another one." I don't know whether that's because of the snakes or not. But the bottom line is, folks, we've made quite a bit of progress in 100 years. And agriculture has always been rapid to embrace change. I hope our organization can provide a leadership role in helping ensure the same in the future working through all types of coalitions to accomplish this goal. I'm pleased to have been here, and I look forward to your questions. Thank you very much.