



**Draft Transition Plan for Phasing Out GE Crops
Public Open House Meeting Notes
October 24, 2016**

Artie Elmquist – This plan seems to indicate that farmers will transition to another type of corn, including going back to conventional non-GE corn. What analysis has been done on the environmental impacts of that outcome?

Jeff Moline (Staff): The plan states that it will help tenants find substitutes for non-GE corn.

Artie Elmquist: If pesticides are the problem, what is the County gaining by banning GE corn? How does this plan accomplish that goal?

Jeff Moline (Staff): Staff is aware of the consequences of returning to conventional corn.

Artie Elmquist: So how does this plan accomplish the goals of reduction?

Sundari Kraft: If GE crops are phased out, there is an assumption that tenants will return to conventional corn (that there is a viable substitute versus sugar beets) and therefore the transition away from GE corn is shorter. But that doesn't seem to meet the overriding goals.

Paul Schlagel: The crops that are grown in Boulder County are a direct response to the dry climate and shortage of water in this region. Sugar beets have been grown for over 120 years, and barley also is grown due to these resource shortages. Big question is what is POS asking the tenants to grow? POS stripped ag land of Big T water, further limiting the potential of these properties. Doesn't see where this transition leads. The County should do its research before requiring a transition. The plan doesn't outline what they expect farmers to transition to.

Mark Guttridge: Details are lacking in this plan. The knowledge base (on alternatives?) is out there but isn't here. The County should focus on encouraging early adopters/ initial users rather than spending research money on demonstrations by 3rd party vendors. That money should be spent towards projects that are on the ground.

John Schlagel: The Tanaka Farm (Haley property) is a perfect spot for a research farm. It should be leased to a number of farmers before starting any sort of transition time frame. These farmers could show what ideas work, and other farmers could see what is working before forcing a transition. The county needs to slow way down before it makes mistakes that will seriously hurt farmers. If the county forces transition and then weather conditions become increasingly drought prone, will have a real disaster.

Adrian Card (Extension): Jeff Moyer from Rodale said that he would be uncomfortable to make any change recommendations without 5 years of demonstration and research.

- Provided and overview of the Ag Research Station proposal
- CSU has expressed an interest in establishing a research station along the urban corridor, with a focus on on-the-ground, organic agricultural research.
- CSU has started a conversation with Rodale about partnering on possible demonstration and pilot in Colorado
- Conversation and research needs to center around:
 1. Climate
 2. Weeds
 3. Soils
 4. Energy
 5. Insects

Shayne Madsen: Agreed that these are good buckets for focused research. However, the county is acting like the only answer for these problems is an organic transition. In view of climate change, this assumption is not necessarily true or predetermined.

Adrian Card (Extension): It is not the intention of the county to give that impression. As the discussion around this issue has been at the forefront in the county, sides tend to get locked-in around evidence from outside of the area that may not hold true in this region and climate. The Ag Research Station could help answer those questions for the county.

Shayne Madsen: Is the county going to do an RFP? The county seems to have chosen Rodale as a partner without determining if there may have been better partners for these demonstration and research plots.

Sundari Kraft: Will the county's research around Climate Smart Agriculture include GE technology? Would like to see that explicitly stated in the plan because right now the plan assumes organic is answer to climate smart agriculture. If GE technology isn't included in this assessment and compared next to other approaches, the results are meaningless.

Rob Alexander (Staff): To clarify, CSU, Rodale and the county are in a conversation. BCPOS had a conversation with Rodale, and CSU was already considering this independently.

Virginia Schultz: Including GE plots in the county research isn't necessary because private corporations and research universities have already done this research. But the county needs organic research. A lot of people feel strongly about "natural and sustainable" agriculture and want to see the elimination of pesticides and herbicides. The county should also be looking at how to incorporate indigenous approaches to agriculture, and also should consider permaculture.

Artie Elmquist: Has Rodale done any of their research outside of PA?

Adrian Card (Extension): Rodale has been very clear that their goal is to increase the amount of certified organic acreage around the country. In order to meet this goal they are looking at setting up satellite stations in other areas such as California and the Southeast.

John Brown: Worried that the county isn't providing near enough time and supports for any sort of transition. Also worried that a big organic corporation will come in and take over properties, kick farmers off and make the transition. The farmers need a support floor before the county decides to give it to a corporate entity to do it.

Rich Andrews: Argument about doing anything that is "science-based." Any research put into place has to be meticulous. Rich has extreme confidence in Rodale (which has included GE crops in their systems) and they have looked at a number of different systems. Rich has been meeting with Rodale for 5-6 years. Rich does not have the same confidence with CSU because they don't have the broadest perspective on organics. But he feels that a multi-party approach would be good. A lot of people are on the side of getting rid of GE crops, but the main issue is the toxic chemicals that are used in agriculture. GE crops are designed to either incorporate toxins or to be tolerant of them, so the county needs to focus on that issue. The real mission is that the crops grown in the county are safe environmentally and safe for food and feed.

Adrian Card(Extension): If both Rodale and CSU are at the table, a greater number of people will feel comfortable.

John Schlagel: If the problem that the county is looking at is climate change, need to consider everything – diesel use, water consumption, soil health, seed availability, etc... All systems need to be put on the table to make a good assessment. The county needs to do a serious evaluation of all cropping systems, with a special focus on the economics of each. Because if farmers aren't making a living, they aren't going to do it. Many, many organic/ natural farmers have gone broke because the economics of their systems don't work.

Rich Andrews: GE crops can still be grown on private lands, just won't be grown on BCPOS properties.

Paul Schlagel: GE technology is used on a parcel of land because of the benefits it provides to that land, specifically weed control. It isn't just a matter of being able to grow it somewhere. The county needs to determine what is best for agriculture. If new systems are shown to be beneficial, farmers will adopt them.

Sundari Kraft: The main point is that without doing the research first, the county doesn't know what is a successful transition plan.

John Brown: The county left out looking at the biological processes. GMO farmers have had success with that technology and need to make money. The county needs to build a biological floor before they make the farmers transition or make them go organic. Can try to make farmers go organic, but will be up against a wall, especially with looming drought conditions and extremely low crop prices. John doesn't have confidence in Rodale. This argument is too trapped in ideologies (GMO vs Organic) and hasn't looked at the biological model. With drought and low commodity prices, have to get farmers across a very wide chasm.

Dan Lisco: What is the driver of the research? Is it adapting to climate change? If so, the transition plan goes out the window. So what is the driver? Is it water use, climate change, GE vs Organic. Can't talk about research until the county figures out what it is trying to address, and that is lacking in this plan. If take away being able to use GE, there will be a lot more tilling of soil, increased emissions from increased tractor usage, more water usage, so addressing climate change is out the door. The county should flip it on to the farmers. Set a goal of reducing inputs by 25% and challenge the farmers to make that happen. What this plan is asking farmers to do is to increase their ecological footprint, and that isn't right. Also, all farmers on BCPOS properties need to be subject to the same requirements around water conservation, healthy soils, carbon sequestration, etc...

Mark Guttridge: Carbon sequestration models need to be explored on farmers' lands and not in research plots. He wants his farm too be one of those models. His model is stronger due to biological models, but they won't work with Rodale or CSU. The biological model will never be "organic." The county needs to work with farmers on their leases; encourage early adopters to try some of these different models.

Adrian Card (Extension): Might still need a central area to do rigorous experiments to see what works.

Mark Guttridge: The economics are totally missing in the transition plan, and the economics also get lost with ag research plots because they aren't big enough.

Adrian Card (Extension): Gene Kelly from CSU questions the competence of research findings when farmers are carrying out the experiments if they aren't doing it meticulously or rigorously enough.

John Brown: Until an approach can get a certain amount of yield, under pivots, can't require any sort of transition. John knows of farmers in Wyoming and eastern Colorado that are getting 7-8 ton hay, 265 bu of corn and 10 ton of alfalfa per acre by combining biological model, GE's and organic.

Paul Schlagel: Again, water is the key component to make any of this happen. They county would better use the \$450,000 a year on water infrastructure improvements versus giving it to Rodale for research.

John Brown: There is a critical mass of farmers in the county right now who understand how the water infrastructure works. If we lose these guys, agriculture in Boulder County won't make it. Can't count on BCPOS to farm these lands.

Eric Lane (BCPOS Director): Along with water infrastructure, what other things should the county be considering?

John Brown: John talked about the enormous need for gypsum inputs on farmland under the biological model to control salts in soils. Applying gypsum is expensive and it must be transported from certain distances. John talked about the need to bring in biological agents, and pointed out that if these have to be organically sourced, would never be able to afford it because coming from out of state. If the county can't afford this, it shouldn't require transition.

Paul Schlagel: Heat is a big issue and is forcing farmers to change the times at which they harvest. Gave an example of the current sugar beet harvest happening from 3 am to 11am otherwise beets aren't cool enough to take to beet dump. Climate change is really impacting sugar beet harvest.

Artie Elmquist: Who will govern this research station? Shouldn't just be staff and BOCC who gets to decide who is on that oversight board.

Jeff Moline (Staff): The county would work with the community to find the problems that need to be addressed. Farmers need to be the primary drivers of the research, and the county wants to answer farmers' questions.

Shayne Madsen: This is the best meeting I've been in regarding this issue. Going forward, transparency will be key. Everyone has to have access to the research and all activities.

Post Meeting Comments:

Sundari Kraft: There is no there there with this plan, and that is FAIR's main message. The county can't set a three year hard stop and expect that some crop is going to magically appear. If they want some sort of transition to happen, they have to do the research first.

Keith Bateman: The transition plan doesn't discuss compensation to farmers at all. If he has to go back to planting non-GE conventional varieties of corn, he will need to put in more hours, will need more employees, more inputs, more water. And what about his time? How will the county compensate him both monetarily and in the intangibles of not getting to spend time with his grandchildren? Under this plan, water conservation goes out the window. If Keith has to use 10-20% more water, will the county provide that? Will the county pay for the increased ditch assessment fees? Non-GE crops require more tillage and that plowing will destroy the soils. How is that conservation? There is an assumption that Rodale will make findings in five years. Keith is a 5th generation farmer and has benefitted from 5 generations passing down knowledge from year-to-year. Additionally, he learns new things every year. Why does the county think that answers will magically appear in a 3-5 year time frame? All BCPOS farmers have to be subject to the same requirements regarding carbon sequestration, healthy soils, reduced water usage regardless of whether they practice "organically," "beyond organically," or "conventionally." What are the incentives for the next generation of farmers to stay here? If they are banned from using latest technologies and processes, and they can't afford to buy a house, what makes farming in Boulder County at all attractive? No talk of subsidies and that needs to be in here. And then, if compensation is given, will it apply for the life of the farmer? It should.

Susan Anderson & Mary Jo Zeimet: It would be better if the plan stated objectives for long term reduction in GE crops on county land instead of an outright ban in 5yrs. The plan should demonstrate the county's approach to meeting target management practices regarding soil health, carbon sequestration, pesticide use, and economic impacts of various agricultural practices based on local research and pilot programs. Additionally, the women mentioned they are beekeepers surrounded by Boulder County open space farmed by Jason Condon. They have concerns about

their dead bees, the effects of neonics, and the validity of the lab analysis showing an absence of neonics in our pollen samples because the chemicals are water soluble and volatile.

Rich Andrews: Boulder County does not need to be alone in the research endeavor. The City of Boulder also has agricultural properties and could be included in the conversation. In addition, Rich has submitted a proposal to Rodale for Rodale to use his private property for a research center. He gave copies of the proposal to Director Lane.

Record of Attendance:

Sue Anderson
Richard Andrews
Keith Bateman
John M. Brown
Artie Elmquist
Mark Guttridge
Shanan Olson
Shayne Madsen
Ron Robl
John Schlagel
Paul Schlagel
Scott Schlagel
Vicki Schlagel
Virginia Schlutz
Dan Lisco
Abby Levene
Jo Zeimet

POS Staff

Jim M
Phill L
Rob A
Eric L
Jeff M
Vanessa M
Leah R
Chase R
Rich D
Adrian C
Jennifer K
P Vargos (Sheriff Dept)
K Grady (Ranger)