

**MINUTES AND PROCEEDINGS OF THE PARKS AND OPEN SPACE  
ADVISORY COMMITTEE**  
Special Joint Meeting with Boulder County Food & Agriculture Policy Council  
To consider a request to grow Roundup Ready Sugarbeets  
on Boulder County open space land.  
**May 28, 2009**

The meeting was called to order at 5:30 p.m. by Christian Meyer in the Hearing Room of the Board of Commissioners, Third Floor, Boulder County Courthouse, Boulder, Colorado.

**POSAC Members in Attendance**

Present: Sue Cass, Lisa Dilling, Eric Hozempa, Mary McQuiston, Christian Meyer, Janice Moore, and Jason Vogel

Excused: David Batts and Paul Jurasin

**FAPC Members in Attendance**

Present: Ramona Clark, Sandy Cruz, James England, Erik Johnson, Dan Matsch, Mark Menagh, Richard Miller, Wendy Moschetti, Matt Pierce, Shanan Olson, Audrey Sheridan, Cindy Torres

Excused: Michael Brownlee and Michael Keown

**Staff in Attendance**

Rob Alexander, Adrian Card, Renata Frye, Phill Leffler, Tina Nielsen, and Luke Stromquist.

**Expert Panel:**

Dr. Phil Westra, Professor, Weed Science, Colorado State University

Dr. Andrew Kniss, Assist Prof, Dept Plant Science, Univ of Wyoming

Don Graffis, Soil Conservationist, USDA – Natural Resource Conservation Service, Longmont Field Office

Doug Grant, Senior Regional Biotechnologist, USDA Animal & Plant Health Inspection Services, Biotechnology Regulatory Service

**Roundup Ready Beets**

*\*POSAC will vote on this item on July 23, 2009*

**Staff Presenter:** Tina Nielsen

See Staff Memo for Detail on Presentation. A DVD was shown: *Roundup Ready(r), The Next Step for Sugarbeets, copyright 2006 Sugar Industry Biotech Council.*

Applicant Presenter: Paul Schlagel, one of the six Boulder County agricultural tenants requesting permission to use Roundup Ready Technology.

Paul Schlagel has farmed for more than 35 years and has leased 375 acres from Boulder County. He currently farms an additional 900 acres. His family has grown 100 sugarbeet crops in the St. Vrain Valley. He brought samples of the many herbicides he currently uses. These chemicals injure the small sugarbeet plants. He showed photos of crops damaged by conventional herbicides, versus crops only exposed to one application Roundup, which show no damage. He states that Roundup crops are not prone to wind erosion. Almost 100 percent of the sugarbeets planted in the U.S. are Roundup Ready. Sugarbeet growers on Boulder County open space land would be at a considerable economic disadvantage not to have this technology. Growers have benefited throughout history from the research done by sugarbeet seed companies. He predicts that very soon there will not be any conventional seed available. Without this technology, he doesn't believe that sugarbeets will be grown in Boulder County in the near future. They increased their yields in 2008 by 25-30% by using Roundup. They have reduced the carbon footprint immensely per pound of sugar produced by decreasing the amount of fuel used while increasing yield.

### Questions

Dan Matsch: Has staff surveyed all sites and would those sites indicated on the map be the extent of the required 50-ft buffer? Tina Nielsen: Yes, if our proposed conditions are adopted, these are the areas that would be taken out of production. It does not include ditches because they are infrastructure for agricultural uses. We are making a distinction between natural and man-made features. Cindy Torres: How long have the ditches been around? Tina Nielsen: Starting mid-1800's. Because of Federal law regarding the use of herbicides, farmers would not be allowed to spray over ditches.

Wendy Moschetti: Are there any sugarbeet farmers today who use other forms of agricultural practice, other than conventional or Roundup Ready? Tina Nielsen: As far as I know there are no organic sugarbeet growers. Wendy Moschetti: Are there any examples of strip tillage use without the use of Roundup Ready technology? Don Graffis: Two plots were grown using strip tillage without Roundup Ready. There was a lot of residue left with strip tillage, so it was hard to make it work effectively. Dan Matsch: You are not using strip tillage this year? Paul Schlagel: No, we do not have a strip till machine right now, but we will, and not just for sugarbeets. The technology of strip tilling is only about 5 years old. Andrew Kniss: In Nebraska, western sugar growers there have put about 75% of the acreage into strip till. As a result, they didn't see wind erosion expected because the residue was there to protect the soil. In addition, they reduced the nitrogen application rates by about 30%. Dan Matsch: Typically, what crop precedes sugarbeets in your rotation? Paul Schlagel: Either corn or barley.

Sue Cass: Monsanto currently holds the patent on all Roundup Ready seed. Is the patent on Glyphosate still in effect or has it expired? Doug Grant: Glyphosate is the active ingredient in Roundup. Andrew Kniss: Glyphosate is no longer under patent; so many companies produce and sell it under various trade names. Sue Cass: You mentioned that Roundup Ready sugarbeets have gone from newly planted commercially in 2008 to 90% of the crop this year. That is a breathtaking speed. Has that occurred with other Roundup Ready crops? Andrew Kniss:

Adoption of most other crops has been much slower. Right now Roundup Ready corn is hovering between 60-80%. The heavy adoption of Roundup Ready beets has to do with the lack of other good weed control technologies.

Jason Vogel: Are the growers who buy Roundup Ready beet seed contractually obligated to use Roundup pesticide? Andrew Kniss: No, they can use any Glyphosate product that has a federal label for use over the top of Roundup Ready sugarbeet. There are several generic brands that qualify. Tina Nielsen: We have been told that if a grower uses a Glyphosate product that is not Roundup Ready, Monsanto will not warranty their seed.

Eric Hozempa [to Paul Schlagel]: Could you repeat your list of chemicals that you have used? Paul Sachlagel: The pre-plant herbicide was Nortron, then Betamix, Stinger and Upbeat applications, in combination. Then more Nortron repeated two more times, then Assure for grass control. And an application of Treflan to control weeds later in the season.

Erik Johnson: We've been told that Glyphosate leaves no residue in the soil, could someone explain what Glyphosate is made from? Dr. Phil Westra: Glyphosate is essentially an amino acid with phosphate tacked on. It's built out of materials that are in living tissue. That's one reason it's considered to be a benign and innocuous herbicide.

Cindy Torres: It was mentioned that there are no instances of weed resistance due to Glyphosate in Colorado. How long does it take for weeds to become resistant? Phil Westra: I have been a weed scientist at CSU for 23 years. Weed resistance is not specific to Glyphosate or Roundup. We first saw weed resistance in the 1950's. Glyphosate has probably taken 20-25 years to see the development of resistant weeds. It's not just a function of how long it's been used, but the intensity with which it's been used. Today there are 12-14 different weed species worldwide that have exhibited resistance to Glyphosate. It is not as massive a problem as it has been for some of the other chemistries that we have used.

Lisa Dilling [to Paul Schlagel]: I'd like to hear a little more about the economics of the farm program. It sounds like if we don't allow Roundup Ready beet production, you might be out of business. Are there alternative crops you can grow to replace sugarbeets? Paul Schlagel: In my particular case, I have avoided planting sugarbeets on Boulder County open space in 2008 & 2009, but we have really pushed our rotations on the other pieces of property that we lease. The amount of capital that we have invested in the equipment and in the Co-op makes it imperative that we stay in the business for a while. The value of our shares was almost zero a year ago; we can't sell them.

FAPC Member (name not given): Given the rapid adoption of Roundup Ready sugarbeets, is there a reason why the approval of Roundup Ready sugarbeets was years behind the approval of other Roundup Ready crops? Andrew Kniss: Deregulation depends on the trait and the species. Roundup Ready corn and soybeans went through a different process to be deregulated.

Sandy Cruz: Is it possible for growers to save their own seed for replanting and not go GMO? Andrew Kniss: The breeding for sugarbeet is complicated. Conventional sugarbeets do not produce their own seed if they are harvested. If they are not harvested, it is unlikely that much of

the seed would survive due to the harsh winter and those that do survive would likely be of poor quality. Shanan Olson: I am a farmer representative of a local organic seed farm. We have produced food grade beet seeds in this climate. They are *Beta vulgaris*. We haven't attempted sugarbeet seeds. However, because they are of the same plant family, I would have to think it worth a trial before it's deemed impossible.

James England: How many Roundup Ready sugarbeets are you requesting for open space land?

Paul Schlager: I would say year-to-year on average, about 30% of our beets would be on Boulder County open space. James England: How many acres of sugarbeets are you currently growing on private land? Paul Schlager: 200 acres.

Janice Moore: It sounds to me that the choices for successful farming, assuming conventional seeds remain available, is to use all these chemical herbicides or use Roundup Ready? Paul Schlager: Those are the only options I see right now. One time we tried using manual labor to keep the weeds out, [comment from Tina: did he say that they used the money they would have spent on chemicals to hire labor?] and then the workers quit midway through the season. It was a disaster.

Christian Meyer: POSAC requests that we have a copy of the limitations that would be put in place for the plan for the June meeting.

#### Public Hearing

- Harry Hempe, Jamestown. He asked what our policy is regarding rotation of GMO corn.
- Shirley Jin, 1430 Ithaca Dr, Boulder. She read an announcement calling for a moratorium on GMO foods. GMO's are banned in other countries. Do Boulder County residents want to pay for taxes for open space lands that produce these crops? We had better understand the science correctly before allowing this practice. She recommended two documentaries, *The World According to Monsanto* and *King Corn*, and a book by Robyn O'Brien, *The Unhealthy Truth: How Our Food Is Making Us Sick*.
- Annie Hughes, 1405 Garfield, Ct., Louisville. She stated that POS has been promoting organic crops. She believes GMO's are a step in the wrong direction. Students could be asked to serve their communities by weeding. GM beets cause allergic reactions and asthma. Why not breed better, stronger beets? Have the farmers looked at the cost of looking for bolted plants every two weeks? Would this cost more or less than manual weeding?
- Tom Schwartz, 1800 Grant St., Denver. He is Co-Chair of the Sugar Industry Biotech Council that produced the DVD that was shown. Monsanto doesn't own sugarbeet seed; many companies own the seed.
- Mike Otto, 1221 8<sup>th</sup> Ave., Greeley. He stated that growers need this technology to remain competitive.

- Famuer Rasmussen, 1342 Trail Ridge Rd., Longmont. He was told that conventional seed is no longer in production. If he is not allowed to use Roundup Ready, he will be finished. It will be financially devastating to him.
- Prudence Scarritt, 1770 Sunset, Boulder. She is concerned that we don't know enough about Roundup Ready crops. What does it do to our groundwater? Why do we need all this sugar?
- Kent Davis, 20607 Northmore Dr., Johnstown. He is an agronomic consultant for sugar producers in Boulder and Weld Counties. He is pretty sure Glyphosate is labeled as an aquatic herbicide. The idea of a 50-ft. offset isn't a viable idea nor is it necessary. He believes other weed control would still be needed, not just Roundup.
- Dr. Sengan Baring-Gould. He argues that there is risk involved. The European community doesn't allow term "biodegradable" for Roundup Ready beets. Bee populations are collapsing worldwide, a concern because bees are pollinators. We don't know if Roundup Ready beets have an effect. He states that Monsanto has been purchasing many seed companies. On the question of sustainability, if Roundup Ready is widely adopted, there will be an oversupply of sugar and prices will fall, which calls into question the idea of economic sustainability. He also asserts that this is an unproven technique, raising questions about toxicity in the ecosystem as other animals eat the genetically engineered plants and spread of protein through pollination.
- Steven Hoffman, Boulder. He is the Executive Director of the Organic Center, which advances scientific research behind the health and environmental benefits of organic food and farming. There is a market for organic sugar, although it may be difficult for local farmers to bring organic sugar to market. We are talking about GMO agriculture on public land. There are many concerns about the proteins causing allergies. American Academy of Environmental Medicine has called for a moratorium on GMOs and mandatory labeling, since proteins can cause allergies. Glyphosate is persistent, it is not biodegradable, and Monsanto has been sited for false advertising. Monsanto has been sited twice for scientific fraud. Also he serves as VP of "Naturally Boulder," an economic development initiative established by the City of Boulder working to foster growth of organic production, and is responsible for over \$3 billion+ in annual revenues contributed to the local economy.
- Dave Georges, 3155 Endicott Dr., Boulder. He is the Founder of Everybody Eats! and the former Chairperson of the Colorado Genetic Engineering Action Network. He submitted two items into the public record, *The Future of Food*, a film by Deborah Koons Garcia and *Seeds of Deception*, a book by Jeffrey M. Smith. He cites a study where genetically engineered crops increased the use of herbicides in the U.S. by 122 million pounds, a 15-fold increase between 1994 and 2004. Overuse of Roundup results in Roundup tolerant weeds. Another report shows no increased yield in these crops, with the exception of genetically engineered corn.
- Lynn Segal, 538 Dewey, Boulder. What is the problem with weeds? Perhaps over time weeds will be suppressed.

- Dr. Phil Westra, 3847 Royal Dr., Ft. Collins, CO. In other countries he has seen the devastation of farmers not having access to adequate technology to sustain their production and protect the landscape. He made the argument that American farmers are some of the best land stewards we have. They want to leave the land to their children. He advocates allowing Boulder County open space farmers the access to the same technology that other farmers have. He argues that the development of Glyphosate has done more to protect our land, soil, and ecosystem than any other herbicide. He is not in favor of mandating crop rotation.
- Ron Shin Chin, Boulder, CO. He stresses that open space is a public trust. This request involves six farmers, six individuals versus the other residents of this county. This should be about the public interest in this land.
- Mary Rogers, 2205 Balsam, Boulder. She argues that this is a risky technology. No one really knows the consequences. This is to grow more sugar. She supports farmers, but sugar is one thing we don't need more of. She would like to find better solutions.
- Tom Moore, 2830 5<sup>th</sup> St., Boulder. He states that Monsanto has been in various cover-ups regarding dioxin contamination. They pushed RGBH on dairy farmers. We as consumers we need to know this information.
- Artie Almquist, 8724 I-25 Frontage Rd. East, Longmont. He is a third generation sugarbeet grower in SW Weld County. He served on the sugarbeet strip till committee. He wants to see the approval to use Roundup Ready sugarbeets. He argues that scientists cannot agree on human causes of global warming. Likewise, scientists cannot agree on GMO technology. The sugar grown in Boulder County this year will be processed with Roundup Ready sugar grown in Weld County. All the sugar gets comingled.
- Eugene Pacheco, Ward. He feels for the farmers, but this is just one more toxic pollutant. What do European countries know that we do not?
- Jules Van Thyne, 10323 Monarch Rd., Longmont. He is one of the six applicants. He served on the GMO Task Force in 2001. He stressed that we all need to coexist in this county. He feels that Roundup Ready technology falls between organic practices and the conventional practice using a full selection of chemicals. Ditch water contaminated with weed seeds is a problem in Boulder County.
- Troy Bredenkamp, 9177 E. Mineral Circle, Centennial. He is the Executive V.P. of the Colorado Farm Bureau. He encourages the boards to consider these technologies. He states that we have fewer and fewer farmers all the time who can handle the acreage in Boulder County. He clarified that the \$340 acreage penalty is not assessed by Monsanto, but rather by Co-op that these growers have purchased into. [Staff verified the acreage penalty is actually \$380]

## Board Questions and Discussion

Christian Meyer: The idea of sustainability keeps coming up. It seems to mean different things to different people. I suggest that in terms of the comprehensive plan, regarding farming and agriculture, staff should be clearer in terms of what is meant by sustainability.

Sue Cass: Is Glyphosate an aquatic herbicide, or not? Can you fly over and apply it over water? Also, could we establish the hierarchy between Monsanto, Roundup Ready technology, the seed producers, and the farmers who purchase the seed? Dr. Phil Westra: Glyphosate is under many names and different formulations. One formulation is approved in aquatic environments, but you are not allowed to apply the Roundup in corn or sugarbeets around water. Sue Cass: So if the formula for sugarbeets is not allowed around water, you are saying that the 50-ft barrier is justified? Dr. Phil Westra: People have been safely using Glyphosate around water for over 20 years. I don't know why the 50-ft barrier, why not 100-ft? Whatever the federal regulations are should be used in this situation. Sue Cass: But there has been a correlation between Glyphosate and amphibian problems? Dr. Phil Westra: I would urge the boards to take a close look at the science behind that assertion. I believe the results are doubtful. Regarding the question of hierarchy, Monsanto developed the genetic trait, they own the gene construct. In some cases they own a company that incorporates that gene into their genetics, DeKalb for example. At the same time, that gene construct is also sold to other companies that are not owned by Monsanto. Monsanto gets the money for the gene, but not for all the rest of the genetics that go into that background. In the case of alfalfa, Monsanto owns no alfalfa seed companies, just the gene. However, Monsanto does own some seed companies. Roundup Ready technology is just the tip of the iceberg. There are many more technologies coming and not just from Monsanto.

Mark Menagh: Is there someone who can address the American Academy of Environmental Medicine concerns? They have asked for a moratorium. Janice Moore: I did try to find out about them. We were getting a lot of e-mail referencing this group, saying that this technology is poison. I could not find much information. I found the academy's homepage with its membership requirements. If you are a practitioner and send \$450, you are a part of the academy. I did not see any white papers, or references to a study committee.

Ramona Clark: Monsanto owns the patent on the seeds, so all the seed companies pay Monsanto for the patent every year that they use the seeds, correct? Dr. Phil Westra: The seed companies pay a royalty for the genetic trait, and that is paid every year that it is used. The company that pays for the royalty cannot resell it; it is only for their use. Ramona Clark: I would like for staff to tell me how much money Boulder County gets from sugarbeet production on their land. Phill Leffler: We are generally in the range of \$300,000-\$325,000 from sugarbeets. The farmers have had to push the rotations and grow on other land to meet their obligations to the co-op. In a good year it could come close to 30% of the gross revenues the county receives.

Ramona Clark: A lawsuit is pending against Roundup Ready sugarbeets. If the suit finds in favor of the plaintiff, is this a moot point? Could it happen that Roundup Ready sugarbeets are no longer available? Doug Grant: I won't speculate on lawsuits that are pending against the USDA. I can tell you that we sometimes get lawsuits from groups that are generally opposed to agricultural biotechnology. Those groups tend to try to say that our process of deregulating a given product was flawed. Our department makes sure that we get good data from companies

when they go through the process of asking that a product gets deregulated. The data is available for scrutiny. In the U.S., about 70% of all corn grown is genetically engineered and about 60% of all soybeans grown are genetically engineered. These crops are shown to be insect resistant and herbicide (Glyphosate) tolerant. Kent Davis [Agronomic Consultant for sugar producers]: We import about half of our sugar from Caribbean countries. We had a tariff system in place that said we would limit how much sugar came in. Now that we no longer have that tariff system in place, the price of sugar has dropped. For the cooperative to survive, they have to be committed to grow so many beets. We need sugar and we should be able to choose what we want to grow. Monsanto came up with a great idea for a herbicide that is very safe. Researchers are working very hard to make safer pesticides. But in other countries, they still use DDT. Do we know if imported foods have been treated with DDT? It is not our burden to determine if our food is safe. We are paying the federal government to see to that.

Jason Vogel: I think that we do need clarification on the idea of sustainability. I think that, for many Boulder County residents, sustainability isn't necessarily economic sustainability. For many of us, sustainability means organic farming and that's what people want to see here. In defining sustainability, it would be helpful to know where the use of pesticides and the use of GMO's fall on the path to a more sustainable future. The real question before us is whether to allow six farmers to grow genetically engineered sugarbeets. We can't bring down Monsanto.

Sandy Cruz: I understand that the tops of beet greens are tilled back into the soil as compost. So then the proteins in GMO greens would be incorporated into the soil and introduced into the bio system and the water table. Is that correct? Answer (name not given): That is something that exists in nature anyway, but I don't know in what levels. Nature is used to seeing this gene. Sandy Cruz: But can the food chain be affected? Answer (name not given): A Roundup Ready trait should break down just like any other protein in the sugarbeet leaf. Sandy Cruz: There is some question about allergies and the proteins in the GMO's, so I would like more research on this topic.

Janice Moore: One thing that I heard that concerns me is the disappearance of farmers from Boulder County. We need our farmers here and so maybe we need to get a better grip on what sustainability really is. Organic farming really isn't sustainable when you are talking about feeding our population overall. What is sustainable for farming in Boulder County to keep our farmers engaged and profitable and help us maintain the open space?

Mark Menagh: Is part of the reason we are being asked to allow GMO beets because there are shares in the Western Sugar Cooperative that are worthless if we don't? Are the economic pressures that the farmers are feeling legitimate to the point that we need to make our open space available to growing GMO's when our community is more biased toward organic farming? I'd like to hear that it is more than just the economic viability for these six farmers at risk. Michael Laber: I am one of the six farmers; I am third generation beet farmer. Boulder County bought land from my grandfather and my father. Without my beet acres, I'll be finished. I need them very badly. It was sold to the county with the understanding that it would be available for farming. Christian Meyer: What I am hearing is that it's the capital investment in growing sugarbeets that is breaking the farmers. In the near term, there is no cash crop that will replace what they are doing today.

Eric Johnson: Is there an alternate scenario if the Commissioners deny the request? My challenge to staff would be for them to come up with at least one possible alternate crop to enable the farmers to continue.

Dan Matsch: What is the origin for the 50-ft buffer? Adrian Card: It came from the understanding that the generic buffer for organic production is 50-ft. That was our best start; there was not exhaustive study.

Dan Matsch: The County recommendations put staff into a policing mode to monitor compliance. We have the same situation with Roundup Ready corn. How is that going? Is there staff on hand to do that? Rob Alexander: Yes, we spend a lot of time on the ground monitoring. There are also recommendations for Bt corn, and we have protocol for that as well.

Audrey Sheridan: I'd like more information on weed resistance and how long it may take to happen. I have seen varying research that shows it happening in as little as 4-8 years. Also, some people have said that fewer herbicide treatments would be required with Roundup Ready crops. Then Mr. [Kent] Davis said that other herbicides would need to be used to try to decrease resistance. How does that all wash out in terms of total amount of herbicides applied? Another question, why does strip tilling only work with Roundup sugarbeets? Artie Almquist: One reason you can grow a much better crop using genetically enhanced technology when you are trying to strip till is because you have more weed pressures when you are not turning all the soil once a year, but rather just the soil needed for planting.

Mary McQuiston: It looks to me that of the six applicants, only one doesn't have enough private acres to meet his beet allotment. I'm wondering if there is a way to work something out in terms of using private versus open space land? Michael Laber: Many of our beet acres have been sold to Boulder County. Christian Meyer: I think, too, that it is because they need to rotate. If they could grow beets on the same land every year they could meet their allotment.

Janice Moore: It seems to me that what I'm hearing is that this isn't just about these six farmers. What are the penalties if we choose not to approve this? Secondly, what happens to those in the future who may want to sell to us, but their offspring will not be able to farm as they choose on the land?

Wendy Moschetti: Since we have heard comments about actually directing concerns to only sugarbeets, if we comment on the actual type of crop, is that going to be ignored? Tina Nielsen: The request from the Commissioners is for you to give your opinion about Roundup Ready sugarbeets. However, if you feel that you need a broader context in order to give your input, that is your prerogative.

Wendy Moschetti: I would also like to see more information on strip till technology and the environmental benefits. Tina Nielsen: We have an in-house video that was made that we can present at your next meetings. Wendy Moschetti: That would be fine, but I would like to see more comprehensive studies on this. Adrian Card: There is a Colorado Conservation Tillage Association that we can derive some good local input from. Strip tillage has been in place for a

decade or more in eastern Colorado so there is some good data from Colorado that we can look at. Wendy Moschetti: Is it possible to do a financial impact analysis showing the impact to all Boulder County residents if this is approved? Can there be other alternatives on how to proceed if this isn't approved for the short term, but it may be approved later, such as a transition period or a taxpayer assistance program?

Shanan Olson: Due to the rotation schedules and GM sugarbeets not being grown on Boulder County open space, does that mean that next year we will be running a deficit in our open space revenues? Will those acres be completely out of production and rotation? Phill Leffler: There will be something grown on those acres and the gross revenue will probably be cut in half.

Shanan Olson: If the byproduct of the processing of the sugar is pulp, which is used for fodder, has there been an analysis done on the fodder, regarding residual residues? Tom Schwartz: The FDA and USDA have conducted testing and the pulp has been approved for animal feed in the U.S., Canada, Japan, Australia and New Zealand.

Lisa Dilling: What is the possibility of selling your shares in the Co-op? Tom Schwartz: The share value actually went to zero a year ago. They probably have some value today, but I don't know what it is. I think they are still a good investment. Lisa Dilling: But you are not locked in? You can sell the shares? Tom Schwartz: We could, but it would be at a loss right now. Lisa Dilling: I think this is a larger issue than just sugarbeets. Other people will come forward in the future wanting to grow GMO's. I would like to see more information about why some countries have banned GM foods. Also, what is the future of organic farming as an alternative? Rob Alexander: We are looking at trying to encourage more organic production; there is a demand. But when we look at transitioning larger acreages to organic, where is the market and how do we make it work on such a large scale? POS is looking at it, but there are significant hurdles. The Commissioners have asked us to transition 10% of our crop land to organic by 2012. Lisa Dilling: How long does it take land to be certified organic after Roundup is used? Rob Alexander: Three years.

Cindy Torres: If we consider going organic on larger acreages, are there Land Use or conservation easement restrictions? Rob Alexander: We recently came up against that. Permanent structures can present a problem.

Richard Miller: We have six of the best farmers in Boulder County in this room tonight. In my opinion, I know of nowhere else in the country where the federal guidelines are questioned that would allow farmers to allow these crops. We shouldn't be here at all. We should stop micromanaging our agricultural tenants or we will run out of them.

#### Wrap Up:

Tina Nielsen: Staff will take all your questions and suggestions and try to get the information you have requested. We may reschedule the future meetings to give us more time to get you the information you need.

Christian Meyer: POS asked a straight forward question based on the application, but you can tell from the feedback you have gotten tonight that you have asked a much bigger question. We

always struggle with answering individual things out of context, which is what we have to do in the end. Please be thinking about the bigger picture: The value of the land, how the public values it, and the trade off with the value of maintaining economically sustainable agriculture in Boulder County.

**Adjournment**

The meeting adjourned at 10:03 p.m.