A meeting in the above-entitled matter was held on December 14, 2015, commencing at 9:02 a.m. at the United States Access Board Conference Room, 1331 F Street, NW, Suite 800, Washington, D.C. 20004-1111.

Russell C. Redding, Committee Chair
Michael G. Schechtman, Executive Secretary
APPEARANCES

Russell Redding, Chair
Michael Schechtman, Executive Secretary
Douglas McKalip, Guest Speaker
Andrew Tobin, Guest Speaker

Committee Members:
Jerome Slocum
Mary-Howell Martens
David Johnson
Isaura Andaluz
Keith Kisling
Paul Anderson
Julia Doherty
Michael Funk
Jill Schroeder
Alan Kemper
Lynn Clarkson
Josephine (Josette) Lewis
Gregory Jaffe
Leon Corzine
Melissa Hughes
Latresia Wilson
Barry Bushue
Kelly Rogers
Angela Olsen
Ron Carleton
Laura Batcha
Douglas Goehring
MR. SCHECHTMAN: Good morning, everyone. This is the sixth meeting of the U.S. Department of Agriculture's Advisory Committee on Biotechnology and 21st Century Agriculture, or AC21, since the Secretary of Agriculture brought back the AC21 in 2011. It has been nearly three and a half years since our last meeting. After the last AC21 meeting on August 27th and 28th, 2012 USDA has been busy implementing many of the recommendations you provided to the Department in your November 2012 report to the Secretary on enhancing coexistence. But we'll speak more about that a little later.

My name is Michael Schechtman and I’m the Executive Secretary and Designated Federal Official for the AC21. I'd like to welcome you all to this meeting and to Washington, D.C. if you've come here from out of town. I'd like to welcome specifically our committee members, I believe 20 of whom should be here today and I'd also like to welcome all members of the public who've come here today to listen to our proceedings and perhaps to provide statements for the committee later this afternoon. Thank you all for coming in this busy holiday season. I'm glad that Congress has extended the deadline on its work on the federal budget so we can all be here today, though we weren't sure up until pretty late and that I hope that all your travels went
smoothly.

I will note that one of our long-serving members, Dr. Daryl Buss, formerly of the University of Wisconsin, has elected to retire from this committee just as he did earlier from his academic post at the University there. USDA thanks him for his service and we will all miss him here. I also welcome our Chairman, Mr. Russell Redding who is now Pennsylvania's Secretary of Agriculture from whom you will hear more in a few moments. I'd also like to note that we have three new ex-officio members on the AC21, Ms. Julia Doherty from the Office of the U.S. Trade Representative, Mr. Ron Carleton from the Environmental Protection Agency, and Dr. Kelly Rogers from the National Institute of Standards and Technology of the Department of Commerce. We will all benefit from their expertise and perspectives. Welcome, Julia, Ron, and Kelly.

I'd also like to note for you that we have a new person from the Secretary's office who is following these proceedings and helping to guide our efforts and who will be attending our meetings as much as he can and he will participate in some of our discussions over the next two days. He is Mr. Doug McKalip, Senior Advisor to the Secretary. Welcome, Doug. Oh, and for this meeting we will have Dr. Jill Schroeder from USDA's Agricultural and Research Service, Office of Pest Management Policy here to
help us along by taking notes throughout the meeting. Thank you so much, Jill. What I would like to do, interrupt my remarks just very briefly since we haven't met in some time and just allow members to introduce themselves, say their affiliation, two sentences at the most for each person so we can just go around quickly, please. Start here.

MR. SLOCUM: I'm Jerry Slocum. I'm from Coldwater, Mississippi. I am a farmer for the --

MR. SCHECHTMAN: Would you please use the microphones? Thank you very much.

MR. SLOCUM: I'm Jerry Slocum. I'm from Coldwater, Mississippi --

MR. SCHECHTMAN: They may not be on, there's a button on --

MR. SLOCUM: It's blinking.

MR. SCHECHTMAN: I know, well, un-blink it. Push it and then try it again.

MR. SLOCUM: Third time. I'm Jerry Slocum, I'm from Coldwater, Mississippi and I farm soybeans and soft red winter wheat and corn and I am here on behalf of the United Soybean Group.

MS. MARTENS: Thank you for breaking it in for me. I'm Mary-Howell Martens. I'm an organic grain farmer from upstate New York, Penn Yan, New York. I also own and operate Lakeview Organic Grain, an animal feed and seed
business.

MR. JOHNSON: Hi, I'm David Johnson. I'm from La Crosse, Wisconsin. I'm a plant breeder formerly with Cal/West Alforex-Dow AgroScience and currently with the Johnson Group.

MS. ANDALUZ: Isaura Andaluz with Cuatro Puertas in Albuquerque, Mexico and I work in projects doing seed development of heirloom and drought tolerant seeds.

MR. KISLING: Keith Kisling from Oklahoma, glad to be here to the committee again. I'm a retired wheat, cattle, alfalfa producer. Kind of nice to be retired, however the last five nights I've been in five different beds trying to travel around, all with the same wife by the way. Glad to be here.

MR. ANDERSON: Paul Anderson, I'm with the Donald Danforth Plant Science Center in St. Louis, Missouri. I primarily work on improving food security crops in east and west Africa.

MS. DOHERTY: Good morning, everyone, I’m Julia Doherty with the Office of the U.S. Trade Representative.

MR. FUNK: Hello, I'm Michael Funk, I'm the chairman and co-founder of the United Natural Foods, the country's largest wholesale distributor of natural and organic foods. Thanks to Michael to get us back together.

MS. SCHROEDER: I'm Jill Schroeder, Michael's
colleague and I have a request for all of you. If you make a comment would you please state your name clearly so that I can get them into the notes? Thank you.

MR. KEMPER: Thank you. I'm Alan Kemper and Mr. Chairman, you must have put the mic that's not working at my place for a reason. Corn and soybean farmer from Indiana. Thank you.

MR. GREGOIRE: Lessons learned.

MS. CLARKSON: My name is Lynn Clarkson, I'm president of a grain company in Illinois, we handle primarily corn and soybeans and those are divided into just about every distinction that's discussed at this table, organic, non-GMO and GMO.

MS. LEWIS: I'm Josette Lewis, formerly with Arcadia Bio last time we met and now with the World Food Center at UC-Davis.

MR. JAFFE: I'm Greg Jaffe, I'm the director of the biotechnology project at the Center for Science and Public Interest, a nonprofit consumer organization here in Washington, D.C.

MR. CORZINE: Good morning, I'm Leon Corzine, a central Illinois corn, soybean and a few angus cow family farmer with my son and my wife which allows me to come enjoy time with you all. And I'm also a past president of the National Corn Growers Association.
MS. HUGHES: Good morning, I'm Missy Hughes. I am general counsel for Organic Valley, the nation's largest organic farmer-owned cooperative and I'm also president of the Organic Trade Association.

MS. WILSON: Good morning, I'm Dr. Latresia Wilson. I am still an emergency room doctor but I'm also, have a few Brangus cattle and vice president of the Florida Black Farmers and Agriculturalist Association.

MR. BUSHUE: I'm Barry Bushue. I farm near Portland Oregon and I'm representing the American Farm Bureau Federation.

MS. ROGERS: Kelly Rogers, and as Michael said, I'm a new member of the committee and I work for the National Institutes of Standards and Technology which is in the Department of Commerce.

MS. OLSEN: Hi, Angela Olsen, senior advisor and associate general counsel at DuPont Pioneer.

MR. CARLETON: Ron Carleton, I am the counselor to the EPA administrator for agricultural privacy and prior to that I served as Deputy Commissioner of Agriculture in Colorado.

MS. BATCHA: I'm Laura Batcha with the Organic Trade Association. I'm the executive director and CEO. Glad to be here.

MR. MCKALIP: Good morning, I'm Doug McKalip, I'm
senior policy advisor to the Secretary of Agriculture at USDA. Welcome, everyone.

MR. SCHECHTMAN: And just so you know, on my left is Mike Gregoire, the Associate Administrator of the Animal and Plant Health Inspection Service and he'll be speaking a little bit later. Okay, so we have a very full agenda for this meeting so we ask that when the meeting is in session conversations need to be limited to those between members. The public will be invited to participate by providing comments to the committee and USDA this afternoon between 3:15 and 5:00 p.m. I think we have a few individuals signed up to provide comments at this meeting. Members of the public who have pre-registered to provide comments, please be sure you have signed up on the comment list so we can call you in order. At least one member of the public has submitted comments electronically before this meeting and we have prepared a notebook of all those comments.

AC21 members and other members of the public, you can peruse the notebook at your leisure at the document table at the back of the room over the next two days. Please don't remove it from the table. We'll be preparing minutes of this meeting and a computer transcript of the meeting will also be available within a few weeks. We hope to get the minutes and all the meeting announcements up on the web. The web address for this committee, the AC21, is
pretty long so I won't read it out to you. But I can tell you how to get there more easily. If you go to the main USDA website at www.USDA.gov, click on topics and then click on biotechnology. You will then see a link to the committee name which will get you there.

For members of the press, you're welcome to speak to whoever you wish during the breaks of our meeting and before or after the meeting itself. We ask that you not conduct any interviews or request comments from members while the AC21 is actually in session. Mr. Redding, our Chair, and I will be available for questions and comments at the end of each day of the meeting. I'd also like to request that all members of the AC21 as well as all members of the audience and the press please shut off your cell phones while you're in the room, something I haven't done yet. They interfere with the microphones and with the recording of our meeting in order to produce a publicly available transcript.

Bathrooms for everyone's information are located outside of this room on the other side of the elevator, one to the left and one to the right. One other important housekeeping matter. Members and ex-officio members, you each have tent cards in front of your place. Please turn them on end when you wish to be recognized. Also, for the transcript please identify yourself when called on to speak.
At the back of the room there's a table with documents. Please take only one copy of each document so that we make sure that we don’t run out. Among the handouts is the detailed meeting agenda. Please note that there are breaks scheduled this morning and afternoon. If there are any additional documents that were brought by any AC21 members for distribution please be sure and provide me copies of those.

For each member of the public who speaks during the public comment period I will need a hard copy of your remarks and an electronic copy so that we can post them on the committee website. I'd like to repeat again that we're planning for a period of one and three quarters hours for public comment from 3:15 to 5:00 p.m. today. We want to be responsive to the needs of the public and we will see as the meeting progresses how we need to structure that time.

Again, members of the public, if you've preregistered and did not sign in already please do so at the sign-in table so we can plan the comment period and develop an order to call the names. You will have five timed minutes to provide your comments.

As has been true of the past AC21 meetings we have a lot that we need to accomplish at this meeting over the next two days. For this first meeting back after our long break we have four objectives. First, to review the AC21
purpose history and operational process and member responsibilities. This will include noting our overall charge and the committee charter, the approach set out in bylaws, listening to some remarks from the Chair about his approach and his goals for the meeting and remarks from the Office of Ethics about the responsibilities of members, special government employees and representatives, especially important for you to consider in this upcoming election season. We may have another election specific seminar from the Office of Ethics at a future meeting.

Second objective, to update committee members on regulator developments and initiatives on biotechnology derived agricultural products. This will include discussion of the White House led initiative to modernize the coordinated framework for the regulation of biotechnology. USDA plans to update its biotech regulations as well as a few brief updates on regulatory developments from outside USDA.

Third objective, to update committee members on USDA activities to support coexistence consistent with the AC21 recommendations. We will have both, we have both summary documents as well as a discussion panel and we will talk about the stakeholders' workshop on coexistence we held in Raleigh, North Carolina in March of this year as well.

Finally, to outline a new task for committee
deliberations and develop a plan for developing it. Mr. McKalip and I will be discussing the new charge with you later today. USDA Secretary of Agriculture Tom Vilsack will be here tomorrow afternoon to follow-up on his vision for your upcoming efforts. But let me note, at this point, that we recognize that we will have a very limited amount of time for this committee to complete additional work during this administration. So we are looking to you for an efficient approach that will enable you to complete your work in only a couple meetings after this one.

Now, for documents, for this meeting we have a set of nine documents, some of which are old and familiar but a few of which are new and most of which you will have received before you left home for the meeting. These are also provided to the public on the document table in the back. They are the Federal Register notice announcing this meeting, the updated meeting agenda, biographies of current members, the committee charter, the committee bylaws and operating procedures, the previous report produced by this committee entitled Enhancing Coexistence, a Report to the Secretary of Agriculture, a document summarizing USDA's main efforts to address the report's recommendations and support coexistence which members received via e-mail, a shorter list of some of the key, tangible accomplishments brought about by your recommendations, a PowerPoint presentation
that will be given in the panel discussing those accomplishments, and finally a memorandum from the White House directing federal agencies to undertake the effort to modernize the coordinated framework.

Let me now speak briefly about the agenda. During this morning's session we will continue with the introductory remarks of Secretary Redding and Mr. McKalip and then address three topics, regulatory developments at USDA, regulatory developments outside USDA, and the actions USDA has taken in response to your earlier report. Then following lunch there will be a refresher session on ethical requirements for AC21 members followed by a session when Mr. McKalip will offer you the new charge for the committee from the secretary and he and I will discuss it with you. And then after a coffee break we'll have the public comment period. We will as always have a -- we do as always have a good chunk of time set aside for the public comments and whatever time is not used for those comments we will reclaim with further discussion about the charge.

Then tomorrow we'll have a recap of today's discussions followed by a mostly free-flowing agenda designed to address what you may wish for a work plan and what additional information you may need from us to accomplish it. I say mostly because again, a key feature of tomorrow's session will be the remarks from Secretary
Vilsack in the afternoon about the current situation and his current expectations for your work. Owing to his schedule, he couldn't be here today and we've had to adapt somewhat. However, as he has consistently been throughout your previous deliberations and in the intervening years since you have last met the Secretary remains committed to furthering the goal of coexistence. We anticipate being able to wrap up tomorrow afternoon no later than 3:45.

After Secretary Redding and Mr. McKalip deliver their opening remarks I'll return to speak briefly in this session to remind you and also inform the other attendees here today about the committee's charter and bylaws and operating procedures. But first, it's my great pleasure to welcome back to his Chair role as Secretary of Agriculture from the State of Pennsylvania, the Honorable Russell Redding.

MR. REDDING: Dr. Schechtman, thank you, and good morning everybody. It's great to see you. You have changed. Just slightly, if not, I know many roles have changed so thank you for continuing to serve on AC21. Part of the discussion with Dr. Schechtman in remaining in Chair was also ensuring that the committee that we had started this journey on continued, it was not going to be a new committee. So thank you for all for staying involved and welcome to Doug McKalip for joining us. And having worked
with Doug on several issues across the last couple of years
very impressed with his work and perspective around
production agriculture and the USDA in the issues of both
coeistence but also just the work in production agriculture
generally and its good public service. So, Doug, welcome,
thank you.

I do want to say thanks again for remaining
involved both in AC21, your work both to the Department of
Agriculture and production agriculture is very much
appreciated. While it's been several years since we've had
the committee together I will say that much has happened
since the issuance of our report November 19th, 2012, the
report was to Secretary Vilsack. We'll hear about the
progress on that over the next two days. I believe it's
fair to say that while we were all challenged by the three-
point charge Secretary Vilsack gave us and wondered whether
our time and talent would produce any measurable advances in
the conversation and actions on coexistence I would say that
I think we can all be proud of the report and the
recommendations, particularly around efforts to bolster the
purity of USDA germplasm, risk management research and the
new territory of using conservation programs to facilitate
coexistence.

Since our last meeting I went back to review and
reread the signing statements where each member had a chance
to qualify their support for the recommendations and several themes emerged as I looked at those signing statements. One was the, the prevention of the unintended presence of problem was certainly preferred over trying to wait for resolution or look for a response. Two, each of the, each of you had stated that the conversation that we had started must continue. And you also noted that you wanted to stay involved in this conversation and engaged in the task that was set forth. So, here we are. We begin a new session with renewed confidence knowing that we can function as a diverse committee with deeply held views on the future of American agriculture just as the strength of agriculture is our diversity so is our diversity as a committee our strength. Protecting, actually encouraging diversity in agriculture production is a shared goal for us. We also know that the diversity brings with it interface issues on the land, landscape, in the marketplace, both domestically and internationally, and most importantly at the consumer level.

I'm sure our work again will be spirited but we all have the objective of making sure we are creating an environment that makes those investing in agriculture stay and brings a new generation into agriculture. What we advise and how we advise the Secretary of the USDA during our deliberations will help determine this environment. And
my choice of the word environment is intentional. It is comprehensive. It includes production agriculture, business, markets, policy, societal issues and the physical environment. No small task for sure. But I look forward to working with you and I'm confident that this group is focused on achieving this environment. I look forward to hearing the updates from the USDA receiving our new charge.

I'll end where I began with a simple thank you to each of you for being involved, staying in this conversation that is at times challenging. We know. And certainly the last three years have demonstrated both the value of the committee and the work but also it demonstrates the need to have this conversation continue. It has not gotten any easier. Each day we read of the complexity of agriculture and the interface issues. I would hope that this group, having demonstrated in the past our ability to mentor the behavior that we want, to mentor the conversation that we know must occur in agriculture is most important to us. So I look forward to the work of the next year of continuing the conversation and welcome, again, Doug McKalip to the committee.

MR. MCKALIP: Thank you, Chairman Redding. Thank you, Dr. Schechtman. And welcome and thank you all for being here. I think I probably haven't seen most of you in person since last March when we had the workshop. I had a
chance to talk to and e-mail back and forth with a lot of you over the course of the last eight months or so. But it's great to see everybody back in person around the table. I wanted to do just a really quick exercise and the good news is you don’t have to use your microphone for it. But you've each introduced yourselves. I want on the count of three for each of you to say your first name and we're just going to do it all together. Okay? One, two, three. Okay. I have no idea what I just heard. We'll try it one more time. One, two, three. Okay. Now, on the count of three, I want everyone to say agriculture. One, two, three. That was pretty clear. I can hear that. It's all together saying the same message, same word. I think that for me that's really one of the key attributes and assets of AC21. The issues surrounding biotech and the future of agriculture are very difficult. They're very technical, there are a lot of moving parts to them, there are a lot of competing voices, organizations and I think a lot of noise rather than signal into this area. And I think that one of the key assets of AC21 is the ability to bring clarity, to come together with very clear recommendations, very clear messages and those messages and recommendations have had a very important impact on policy and work, especially of USDA but I think throughout the executive branch.

Secretary Vilsack has been preparing for this
meeting, you know, is just reviewing the actions and I think
he expects a lot of his Department to follow-up on and work
on the things that this committee recommends. And just
looking at a few of them really quickly, you know, and as
you all said agriculture it was very clear to me that you
all, regardless of organization, background affiliation, are
all here to help support agriculture in one form or another.
It may be to ensure a health and abundant supply of food to
help ensure that we're able to feed nine billion people in
the future, it may be a mixture that we're even more
sustainable than we currently are as a food production
system, to meet new market possibilities out there in terms
of specialty crops, organic crops, new consumer interests
that may be emerging, to capitalize on those markets and
make sure that we're competitive and to reach new cutting
edge science and achievements that can be had through
technology and innovation and just essentially ensure that
the future of agriculture is everything it possibly can be.

We have taken the recommendations as a Department
that AC21 has put forward and put those into action.
Everything starts with seeds so I'll just quickly mention
that one. As you all have asked USDA to look at its own
germplasm and its own seed stock to ensure that it is in
fact what we believe it is or say it is. USDA has put into
motion and you'll be hearing from Dr. Redding a little bit
later this morning about the specific activities to review our own germplasm to the degree certainly possible to know that it is what in fact is on the label and the category.

Using conservation programs to help with coexistence. In my 21-year career with USDA I spent about 16 at NRCS. And there is really I think some great work happening. NRCS published a new organic handbook this year which I think for the first time makes very clear references to unintended presence and the ability to help farmers use conservation programs that might traditionally be targeted toward water quality, air quality or wildlife habitat, those types of resource concerns and see if there are practices that are compatible with limiting gene flow and unintended presence that NRCS will work on that with producers at the local level as well. That's incredibly important.

Gathering data. This year for the first time we included survey data and the organic survey on loses that were experienced by farmers due to unintended presence. And that data certainly is helping guide us and know the scope, magnitude and location of where losses have occurred.

Crop insurance, and you'll be hearing from Brandon Willis with Risk Management a little bit later today. We can probably have just an hour discussion on crop insurance. I think it's pretty amazing the strides and work that's happened there, everything from eliminating the surcharge
for organic, changing the price list, offering whole farm revenue protection for organic farmers. All this has resulted in I think a 25 percent increase of organic producers. There's certainly a lot more to do but I'm pretty excited about what's happened so far, just within the crop insurance program alone.

Research, we'll be hearing a lot about that as well. I think just amazing strides in our research community in this area. There's certainly more to do there as well as we get our new foundation up and operational that was authorized in the 2012 Farm Bill. And then I stated with seed, I'll end with seed. Some of the innovative work that's happened, I want to give a shout out to the American Seed Trade Association for a lot of the work they've been doing on making sure that we've got varietal availability that helps in the areas of coexistence.

So that's really just a few areas of accomplishment that AC21 had recommended to USDA that our Department has taken very seriously the implementation work and will continue to focus our agency's resources and mission areas on ensuring that we meet the expectations and the recommendations that came out of this committee. So you've got a tremendous body of work to build upon I think for this mandate that we'll be talking about over the next few days, a tremendous body of work to build upon and I
think a lot of folks within the executive branch and in this
town are looking to AC21 to see where the next steps will
come from and what those new recommendations to us will be.

As we do that I would just encourage that we start
afresh. We've got a lot of new faces around the table, new
members as well and it's important I think to take a fresh
approach as always. When I signed in downstairs at the
concierge desk I walked up and put my pen down, I started to
write 12 and I looked at the line above me, /15. And
Michael will tell you all that I get kind of confused
sometimes about dates and meetings and I was pretty sure
this meeting was going to start on the 14th. And I realized
that someone about 10 visitors before me had arrived and
wrote 12/14 and that was replicated I think 10 times on the
sheet because the person just wrote what was on the line
above them and I almost did the same thing. So, I think
it's that human nature of sort of taking, you know, what
the, the last line of the paper was and sort of duplicating
it. This committee never does that and has taken a very
fresh approach to issues of coexistence and I would just
encourage the team to continue to take the fresh approach.
As I mentioned, this is a very difficult topic, it's one
where there's a lot of noise and voices out there and it's
sometimes easy to renew the battle that you heard last on
the radio or on the Hill or wherever. And I think the
strength of AC21 has been the ability to speak with that one clear voice to set the stage for where agriculture will really be in the 21st century. So, again, I thank you all for being here. I look forward to visiting with you a lot over the course of the next two days. And with that, I'll turn it back over to Dr. Schechtman.

MR. SCHECHTMAN: Thank you. Now, I'd like to return just briefly for benefit of members of the public and to remind committee members of course about AC21's overall mandate under its charter as well as some key points from our bylaws and operating procedures and past practice. First, a reminder about the overall mandate to the committee under the charter. Under the charter the AC21 is charged with examining the long-term impacts of biotechnology on the U.S. food and agriculture system and USDA and providing guidance to USDA on pressing individual issues identified by the Office of the Secretary related to the application of biotechnology and agriculture. Under the second half of that broad umbrella, the committee did its recent work on coexistence and will be continuing its work here and over the next few days.

How does the committee operate? Just a few points. Under the bylaws which are on the back table, AC21 members first agree to operate in good-faith on all aspects of your discussions. I think you all know, know how we've
operated and will continue that way. The committee operates through open meetings unless there's a compelling reason not to do so as provided for under the Federal Advisory Committee act. We have never invoked any such reason to close a meeting of the AC21 in the history of the committee. The committee may utilize sub-committees which do not make decisions for the committee but may prepare information for the whole committee to consider in open session. The committee seeks to operate via consensus though members may call for votes on specific issues if they so choose.

Now, to quote more specifically from the bylaws, quote, the AC21 will seek to operate via consensus in recommendations made to the Secretary of Agriculture within the constraints of fixed time periods allotted for work on designated issues. Therefore, if consensus on specific substantive proposals is not possible the AC21 will make every effort in any recommendations or findings provided to the Secretary to articulate both the areas of agreement and disagreement and the reasons why differences continue to exist. If it is required that the AC21 report to the Secretary by a fixed date, recommendations or findings on which it has not been possible to achieve full consensus a report shall consist of those elements upon which there has been consensus plus an accurate description of non-consensus recommendations and the points of disagreement within those
recommendations developed jointly by the AC21 Chairman or
Chairwoman and the Executive Secretary. Committee members
will be given the opportunity to confirm and/or improve the
accuracy of the draft report. AC21 members shall be
afforded the opportunity to provide to the Secretary in
parallel and in a timely manner any comments on the accuracy
of such a report.

Restating this in terms of the work products that
we've done thus far, reports of this committee are drafted
by the Chair and me in a manner that attempts to incorporate
the views of committee members from committee discussions.
When a report is produced members will have the opportunity
to make factual corrections and then will be asked to decide
whether they will join in consensus in supporting the
report. Members may choose either to join in consensus or
not. In either instance they may choose to provide
additional comments to go along with their choice. Mr.
Redding referred to those as assigning statements. All such
comments get appended to the final report. That was the
approach which was successfully employed for our earlier
report. We can revisit how we will incorporate this into
our planning and discussions tomorrow. The last thing I
want to mention is at the break, at the coffee break we will
have calendars that are put, that will be put out at all
members' places to fill out so that we can get your idea, an
idea of your availability for subsequent meetings. Please fill them out today or at the latest by noon tomorrow so that we can compile all of that and begin to plan earlier rather than later when our next meetings will take place. Thank you. Any questions? Greg?

MR. JAFFE: How many meetings are budgeted for the AC21 for this year?

MR. SCHECHTMAN: Budget is a funny word --

MR. JAFFE: Okay.

MR. SCHECHTMAN: -- just at the moment.

MR. JAFFE: How many are planned or what do you anticipate?

MR. SCHECHTMAN: Beyond this meeting, two or at most three.

MR. JAFFE: For this fiscal year? Until the end of September?

MR. SCHECHTMAN: That is all that -- beyond that we can't say anything.

MR. JAFFE: Okay.

MR. SCHECHTMAN: Anything else? Okay. If not -- okay, the next, I'm sorry, we've gotten a little behind on our schedule. But the next item on our agenda are, is updates on biotechnology regulatory developments at USDA since the last meeting. And I'll turn it over to Michael Gregoire, the associated administrator of USDA's Animal
Plant Health Inspection Service.

MR. GREGOIRE: Thank you, Michael. And good morning, everybody, and thanks for the opportunity. Thanks for the opportunity to update you today on regulatory developments that have occurred since your last meeting in August 2012. Basically I want to cover three areas today in my remarks. One is petitions for non-regulated status. Number two is oversight over regulated field trials. And number three is updates to our biotechnology regulations.

So, starting off with petitions for non-regulated status. In 2012 we announced a major process improvement effort with respect to reviewing and making decisions on petitions for non-regulated status. The goal of that process improvement initiative was to improve the timeliness of our regulatory decisions on these petitions without sacrificing the thoroughness or quality of the analysis that we do and also providing the public with an additional opportunity for public input into that process. So, those changes were implemented. They were announced in a Federal Register notice that year. At the time we had 23 petitions before the Agency. Today we have just three. All of the 23 -- or 22 of the 23 that we had before us at that time have all been decided upon. The only one that remains from that backlog at that time is a petition for a freeze-tolerant eucalyptus for which we're developing an environmental
impact statement and currently in consultation with the Fish
and Wildlife Service with that.

Since your last meeting in August 2012 we made 27
determinations of non-regulated status. When we announced
the changes the average time to make decisions on these was
taking over three years. We have that now down to about 18
months and I feel like those that are coming in now we can
get done in 13 to 15 months. And again, in the new process
we have provided an additional opportunity for public input.
So that is when we have a petition, once we've deemed it
complete we make it available to the public to provide us
input before we start our analyses.

Among those 27 petitions that we granted over the
last three years the ones that garnered the greatest public
interest were petitions for 2,4-D and dicamba-tolerant corn,
soybeans and cotton. Those were all informed by an
environmental impact statements that the Agency prepared.
The other one where there was a good deal of public interest
was a non-browning apple that we granted non-regulated
status for. It was the first apple, GE apple that we had
approved. And I'll also just mention that in a Cohort 2014
EPA and USDA announced collaborative measures to address
herbicide weed-resistance issues.

All right. Let me now turn to the oversight of
regulated field trials. This is an aspect of our regulatory
program that's very important to the agency. The objective of those regulations is to ensure the regulated field trials are confined in that the material is accounted for. We have put additional resources into this oversight over the last few years. We're doing more inspections now than we did back then and we have, we're hiring dedicated staff in the biotechnology regulatory services unit who are basically devoted fulltime to this effort. Prior to that, we used field people from our plant protection and quarantine organization who are trained to do these inspections but many of them only did a few a year, you can only do a few a year if you don't have the expertise and experience to do it as well as having a dedicated staff. So we're hiring folks to focus on this fulltime. They'll be geographically dispersed around the country and they will be doing most of the field trial inspections for us.

In October of this year the Office of the Inspector General completed and published a review of a regulatory oversight of field trials. It was basically kind of a re-look or revisiting of an audit that they did back in 2005. In that audit they had made 28 different recommendations for us, 25 of which were implemented. The three that weren't all went to updating our regulations which I'll talk about momentarily. But they made recommendations in October. Their report and the Agency
response to it is available on the USDA website. We can provide that link to members if you want to look at the details of that. We agree with the recommendations that they have made and we're in the process now of reaching a final management decision on all of those recommendations with them and we anticipate implementing all of those recommendations of the next year.

Another thing we're doing is developing a new electronic system in APHIS that is going to replace our legacy ePermit (phonetic sp.) system which is used not just to issue permits for field trials but to manage our inspection activity and reporting and so on. So that new system will give us better capability for tracking and maintaining accountability. In May of 2013 we announced an investigation of a GE wheat find in Oregon and we issued a final report on that back in September of 2014. It was in an area where there had been no previous field trials. The report of investigation which was very, very exhaustive, we could not trace the source of that find to any particular activity or event. There was extensive testing done, monitoring of the wheat seed and wheat supply by APHIS estates in the industry and there were no other incidents found related, related to that. And then we had a second situation in Montana which the investigation is wrapping up now. This is a location where there had been previous field
trials of GE wheat. And our report of investigation in that incident in Montana we expect to release early next year.

On Friday last week we announced that we are bringing GE wheat field trials under the permit process in APHIS as opposed to the notification process. The Agency put out a statement last Friday on that. Turning now to an update of our, of our regulations. Our regulations were first put into place back in 1987 and there's been a few modifications of those along the way. We feel like those regulations have been effective in ensuring that the introduction of GE plants in the environment is safe for U.S. plant health.

Nevertheless, those regulations are now 20 -- what is that, 28 years old. And certainly the science has changed. It is changing very rapidly and new technology is evolving very fast. So we believe it's time to update our regulations. In addition, in the intervening years Congress passed the Plant Protection Act which consolidated some of the different statutes that we operate under in APHIS. And as I said, the Inspector General's Office has recommended that we revise and update our regulations and a forthcoming GAO audit I think will recommend that we update our regulations as well. We're currently at a stage in the process where we are getting public input and stakeholder input about what the new regulatory system ought to look
like. We, our staff has done a lot of presentations with different groups. Last month at our annual stakeholder meeting we covered the subject. So we're still in that process of gathering stakeholder and public input. When we withdrew the 2008 proposed rule back in February we also held a webinar and took public comments. And I don't remember the exact number but it was tens of thousands of comments and suggestions that we got.

So, there will be continued opportunities for public and stakeholder input on what the new rule should look like. The next formal thing will be a notice of intent to prepare an environmental impact statement that will inform the development of the new rule. The notice of intent for an EIS is basically a scoping document where we ask the public what issues that we should analyze related to a new rule, what alternatives we should consider as well. And so I expect that that NOI will be published early in the new year. So look for that. So anyway, that was just a very quick update on those three areas on developments since your last meeting in August 2012. I'd be happy to take your questions at this point.

MR. SCHECHTMAN: Greg?

MR. JAFFE: Mike, one of the things that came out of our coexistence report was to do voluntary conflict analysis and coexistence plans that would come along with a
petition for non-regulated status. So, I was curious if you could update us on whether that voluntary policy has been implemented, whether any of the 27 petitions that you talked about that were granted had a voluntary conflict analysis or a coexistence plan with it, what response you've gotten from developers or people who've come in for petitions that now might be in the pipeline about whether they're doing those or not.

MR. GREGOIRE: Uh-huh. Okay, we haven't implemented that specific recommendation. Most petitions for non-regulated status that are submitted to us are accompanied by an environmental report that helps inform the development of the NEPA analysis that we do and the NEPA analysis, and often these environmental reports do include some aspects of coexistence or that is the impacts of drift and things of that nature. We haven't implemented that specific recommendation. I think we're going to be talking about the specific follow-up actions later this morning.

MR. SCHECHTMAN: Let me just --

MR. JAFFE: Can I just --

MR. GREGOIRE: Go ahead, Michael.

MR. SCHECHTMAN: Actually, I'll mention it when we get to that session.

MR. JAFFE: So, can I just follow-up for a second? Because I don't think it was a recommendation of our report
as much as the conflict analysis, those were things that were announced by the Secretary as things that you guys were going to do as a response to the report. So, I guess, so what you're telling me is it hasn't been implemented yet and nobody's done it yet. One other question I have is I know that now APHIS has started a new policy with extensions for non-regulated status as opposed to everybody needing to file a petition and start from scratch. And I wonder if this policy on conflict analysis will extend not just to petitions for non-regulated statuses but also these extension decisions that are being made.

MR. GREGOIRE: Well, first back to the voluntary coexistence analysis. We presented that at the coexistence conference last spring as one of the possible things that USDA would undertake. The purpose of which was to get input on that at the conference and following the conference. And I'd say the feedback on that was lukewarm. And with respect to the extension process, just for everyone's benefit, the extension process is a process by which we can extend non-regulated status to a GE plant that is similar to one that we have already deregulated. And so we have, at our November stakeholder meeting announced some new guidance on the use of extensions which I think we'll be publishing on our website very shortly.

MR. JAFFE: Thank you.
MR. REDDING: Yeah, Lynn?

MR. CLARKSON: Lynn Clarkson. Over the past three years the markets of the United States have drawn in, especially corn and soybeans, for an increasing number of countries, including several countries that have their own GMO development or biotech development. And those are now arriving in small shipload units in addition to arriving in containers. What does the U.S. do to protect itself against getting unregulated, untested, unmonitored genetic events coming in in such loads?

MR. GREGOIRE: Uh-huh. We do an annual vulnerability assessment with help from the foreign ag service to basically monitor and keep abreast of GE products that are being developed in other countries. And then we do outreach efforts with those countries to help them understand what the U.S. regulatory system requirements are. And so that's our primary strategy for dealing with imports.

MR. REDDING: Keith?

MR. KISLING: Keith Kisling. Michael, I'm the wheat representative on the committee probably since I was past chairman of U.S. wheat and I'd like to tell you that nobody really likes added regulations. However, the requirement to have a permit now I think is probably a good idea for testing and the reason for that being I think we got a little sloppy on some of our testing that was
happening and it was showing up around. We don't want that to happen as long as we don't have a commercially released wheat at the present time, we want to keep that status of non-GMO wheat in the world and so I commend you for that.

MR. GREGOIRE: Okay. Thank you.

MR. REDDING: Yeah, please, Laura.

MS. BATCHA: Laura Batcha. I, I have three questions and I don't have the agenda in front of me so I apologize if you want to defer me to another point in the discussion. So, on the petitions for non-regulated status, it may not be an appropriate discussion for this committee but I am noting the ability on the part of USDA to use these sort of streamlined processes to accelerate the reviews and deal with your backlog of the 27 petitions. And it struck me because we have a similar backlog at NOP within AMS on our regulatory development for organic and we've had a pretty poor track record of bringing forward final regulations based on our national organic standards board consensus recommendations to USDA on advancements to the standards. And so I'm interested in learning the approaches that APHIS may have used to streamline these processes because we seem to be bogged down in a system that is taking, we did an analysis this last fall, on average 12 years to complete a final regulation from a time of a consensus recommendation coming out of our governing FACA
board. So we have to find a way to improve that process. So we could maybe parking lot that but I am really interested in any techniques that USDA used to address this problem because I think we could use that brainpower on the organic side.

My question on the oversight of the regulated field trials, we also welcomed the permit process announcement on the wheat on Friday and when the incidents happened back in May of 2013 one of the requests that we made to the Department because in our view USDA rightly identified sensitive overseas markets and collaborated directly with those governments to release the standards and the methodology to test for the presence of these traits in order to help calm the markets about how widespread those finds were and the impact to trade. Domestically our market for organic products is what I'm speaking about specifically but for non-GMO products it's not different. It's a domestic market but it also has that same sensitivity to presence. We made an official request to have those standards and methods released so that domestic markets could test for the presence so that if in fact they were limited as was communicated and as was appeared to see how it played out in terms of international trade that there would be the ability to test and reassure the domestic market as well and that was not made available. And I note
that in the TPP Agreement reached by the Administration in the biotech annex there's a non-binding agreement amongst parties to release this same type of standards and methodology in unapproved trait finds. So again I ask you in, in your oversight of the regulated field trials to consider making those methodologies and testing standards available to domestic markets similarly as to foreign governments.

And then I think my third question, and you could give me an update on that, work on the regulated field trials, that may have been addressed already and I'm not aware of it. The third area is on the review of the regulations in the plant pest act in part 340 and you and I have had conversations about this, Michael, and we've provided comment. And I think specifically wanting to continue to have the conversation about the interpretation of USDA's authority regarding consideration of economic and environmental impacts in that review. And I know we've had a discussion about bringing in the noxious weed authority in addition to that, into the plant pest determination and how narrowly or broadly you can view noxious weeds. So I guess, you know, my understanding as I think we're probably not making progress against what we've identified as, as our goals in that review of the regulation. But I'd love to know whether or not in USDA's assessment there have ever
been alternative views of the authority that would accommodate environmental and economic considerations.

MR. GREGOIRE: Okay. Well, let me say something about each one of those three. First of all, with respect to regulation updates, I'd say in defense of my, in empathy with my colleagues at the ag marketing service, rulemaking is really difficult to do. The changes that I described to the petition process are all sort of internal process changes that we made under the existing regulation. So that didn't require a regulatory change and we've been at, trying to change the biotech regs for more than seven years.

With respect to the testing standards and methodology following the wheat incident, I don't know all the particulars of that other than that we rely on the ag marketing service and grain inspection packers and stockyard agency to help us when we have a regulatory incident like that and need testing.

MR. KEMPER: Mr. Chairman, can he speak up or we get the mic a little louder? We're both having difficulty down here. Thank you.

MR. GREGOIRE: Okay. On the testing, we use the services of other agencies to help us when we have a regulatory incident like the GE wheat. But, you know, we take note of what your recommendation and suggestion is there. With respect to the noxious weed authority, it is
our current thinking that we would use the noxious weed
authority in the regulations but not for managing economic
impacts. Our thinking is that we would use that noxious
weed authority consistent with how the Agency has used it
historically. That is for weeds that are invasive and
difficult to control and cause severe physical harm or
damage to other plants or plant products. But it is a very
important issue in terms of I think it's one of the key
issues in terms of the new rule. That particular question
on the noxious weed authority is one of the top policy
decisions that will need to be made on the new rule.

MS. BATCHA: Thank you.

MR. REDDING: Okay, thank you. Certainly some
topics that I'm sure will be themes of some of the updates
here later this morning and this afternoon. So thank you
for the questions. Let's pick up with the agenda. Michael,
thank you first of all. We'll pick up with the White House
Initiative discussion, Michael and Doug.

MR. SCHECHTMAN: Thank you. In this session we'll
provide you with some updates about the latest efforts on
the part of the U.S. government more broadly to update the
overall framework employed for the oversight of genetically
engineered products in this country and also mention a few
other significant developments, again for your information,
that have taken place outside of USDA. As Russell has
indicated, I'll start and Doug will follow up with some other updates.

Now, I want to stress that each of these topics could begin potentially lengthy conversations themselves but the session is being provided for your information only. These topics are not part of your charge and there are other venues for detailed discussion of the pros and cons of these things. First, the White House coordinated framework -- the coordinated framework update. I'll start with a little background.

As you heard a couple of minutes ago, in 1986 the White House Office of Science and Technology Policy issued the coordinated framework for the regulation of biotechnology. It was the result of an interagency working group which sought to achieve a balance between regulation adequate to ensure health and environmental safety while maintaining sufficient regulatory flexibility to avoid impeding the growth of an infant industry. That was a quote.

Some of the key features were that the agencies were to work together in an integrated and coordinated fashion and together should cover the full range of plants, animals and microorganisms derived through the new genetic engineering techniques. Second, where regulatory oversight or review for a particular product was to be performed by
more than one agency coordinated reviews should occur. Third, reviews conducted by each of the regulatory agencies were intended to be of comparable rigor. And fourth, it was determined that existing legal authorities were adequate to regulate these products and existing laws were to be used. And other those laws roles were articulated for USDA, FDA, and EPA.

A fundamental principal for the U.S. approach, articulated in a 1992 update, was that the process of modification is independent of the safety of the organism. Although the new biotechnology processes can be used to produce risky organisms so can traditional techniques. It is the characteristics of the organism, the environment and the application that determine risk or lack thereof of the introduction, not the technique used to produce the organism. Again, that was a lengthy quote.

So, regulations began to be put in place in the 1980s but the overall framework has not been changed since the early '90s, has not been updated since the early '90s. That changed with a July 2nd, 2015 memo from the Executive Office of the President to EPA, FDA, and USDA outlining a new task; that of modernizing the regulatory system for biotech products. Its stated objectives are to ensure public confidence in the regulatory system and to prevent unnecessary barriers to future innovation and
competitiveness by improving the transparency, coordination, predictability and efficiency of the regulation of biotechnology products while continuing to protect health and the environment. So, the effort is intended to maintain high standards that are based on the best available science and that deliver appropriate health and environmental protection, to establish transparent, coordinated, predictable and efficient regulatory practices across agencies with overlapping jurisdictions, and to promote public confidence in the oversight of the products of biotechnology through clear and transparent public engagement.

Accordingly, the memo called for the establishment of a biotechnology working group under the emerging technologies interagency policy coordination committee including representatives from the Executive Office of the President, EPA, FDA, and USDA. The group is to have three tasks, to update the coordinated framework to clarify the current roles and responsibilities of agencies that regulate the products of biotechnology, to development a long-term strategy to ensure that the federal regulatory system is well-prepared for the future products of biotechnology, and to commission an independent, external analysis of the future landscape of biotechnology products. For each of these I'll describe them briefly. There are more complete
descriptions of the tasks that can be found in the actual memo which has been distributed to committee members and the public on the table.

The main objectives for the task of updating the coordinated framework are to clarify which biotechnology products are within the authority and responsibility of each agency, to clarify the roles that each agency plays for different biotechnology product areas, particularly for those product areas that fall within the responsibility of multiple agencies, and how those roles relate to each other, to clarify a standard mechanism for communication and as appropriate coordination among agencies while they perform their respective regulatory functions and for identifying agency designees responsible for this coordination function, and clarifying the mechanism and timeline for regularly reviewing and updating as appropriate the coordinated framework to minimize delays, support innovation, protect health and the environment and promote the public trust in the regulatory systems for biotechnology products.

In terms of the long-term strategy the objectives are to improve transparency, specifically which includes working with stakeholders to identify barriers to innovation, collaborating to inform efforts, increase transparency, streamline processes, reduce costs and response times and ensure the protection of health of the
environment, coordinating on development of tools and mechanisms for assisting small businesses, initiating development of a user-friendly set of tools for presenting the regulatory agency's authorities, practices and bases for decision making to the public and updating these tools and practices regularly to ensure optimal transparency and proactively engaging with the public to discuss how the federal government uses a risk-based scientifically sound approach to regulating the products of biotechnology and clearly communicate to the public which types of products are regulated, which types of products are not regulated and why.

And finally for the external, independent analysis of the future landscape of biotech products the overall task is to perform a review to help inform future policy making which will identify any potential new risks and/or risk assessment frameworks and also identify any areas in which the risks or lack of risks related to the products of biotechnology are already well understood. The White House -- so that's a whole lot of words. The White House memo indicated that one year hence would be the completion date. The biotechnology working group was formed and the first thing it did was issue a request for information from the public with comments due by November 13th of this past, of this year. The request was for data and information
including case studies that can assist in the development of the proposed update to the coordinated framework, to clarify the current roles and responsibilities of the EPA, FDA, and EPA, and the development of a long-term strategy consistent with the objectives described in the memo.

So, the ETIPC biotech working group received and is currently reviewing 902 comments in response to the request for information. As I said, that review is ongoing. A large fraction of the comments appear to discuss issues more closely aligned with the long-term strategy document rather than the update to the coordinated framework, the clarification of what is happening now. Three public meets are to be held in conjunction with this process. The first one was held on October 30th, 2015 in the D.C. area and the other two will be held over the next several months.

The coordinated framework update will be published for public comment before finalization. But let me just make two important points about this process. First, the White House memo affirmed the existing principles on which the coordinated framework is based. So nothing that the working group does is likely to change the overall approach. Second, the first thing that you and other members of the public can expect to see emerging from this effort is a clarification of the existing practices of federal agencies. That will be particularly important because there has been,
as the years have passed, some lack of clarity for some
types of organisms as to who regulates what. So this effort
should significantly help for stakeholders and the public in
this regard. That's all I'd like to say about the White
House initiative.

Now I will just mention briefly a few other
updates from outside USDA. Again, these are briefly just
for your information on the chance that you haven't heard
these as yet. First, I will start with a few updates from
the Food and Drug Administration and then Doug McKalip will
talk about some other topics as well. The FDA has provided
me with the statement that you will hear now. For each of
the following announcement from them I have the web
addresses for the relevant documents on a sheet here at my
desk and I'll provide them to committee members or members
of the public who wish to look at them at the break but I'm
not going to read them out for reasons of time.

On November 19th of this year the Food and Drug
Administration approved an application related to
AquAdvantage salmon, a genetically engineered Atlantic
salmon that reaches a growth milestone important to the
aquaculture industry more quickly than its non-GE
counterparts. AquAdvantage salmon raised for food use are a
triploid, all-female population. The agency determined that
the recombinant DNA construct imparting the faster growth
trait was safe for the animal and that the edible products from AquAdvantage salmon were safe to eat and that the AquAdvantage salmon did indeed reach that growth marker more rapidly. The Agency also prepared a comprehensive draft environmental assessment that was issued for a 120-day comment period and that was issued in final form at the approval indicating that the approval would not have a significant impact on the environment of the United States. Under the conditions of the approved application, AquAdvantage salmon may only be bred at the highly physically contained broodstock facility on Prince Edward Island and then shipped to the Panamanian highlands where the triploid, all-female, eyed eggs are hatched and salmon raised to market size in highly physically contained facilities, harvested and processed.

In addition, the Agency released two guidance documents for the labeling of food that has or has not been derived from GE plants to help food manufacturers -- excuse me, two guidance documents related to biotechnology in food. The first of these is a final guidance document for the labeling of food that has or has not been derived from GE plants to help food manufacturers who wish to voluntarily make that distinction on food labels. The Agency also released a draft guidance on the voluntary labeling of food that has or has not been derived from genetically engineered
Atlantic salmon to which, again, a link, and I can provide a link for that. The docket for public comments for that last one will be open for 60 days starting on November 24th of this year.

My final announcement from FDA is that on December 8th FDA approved Kanuma or sebelipase alpha as the first treatment for patients with a rare disease known as lysosomal acid lipase deficiency. The action involved approvals from two FDA centers. FDA's center for veterinary medicine approved an application for a recombinant DNA construct in chickens that are genetically engineered to produce a recombinant form of human lysosomal acid lipase protean in their egg whites. FDA's center for drug evaluation and research approved the human therapeutic biologic Kanuma which is purified from these egg whites based on its safety and efficacy in humans with this enzyme deficiency. That concludes the statements from the Food and Drug Administration. Now I'll pass it along to Doug to talk about some additional updates.

MR. MCKALIP: Thank you, Dr. Schechtman. I'm going to cover labeling real briefly here. And essentially for sake of clarity there are four trains on the track on labeling, three of which are puffing smoke and moving down the track, the fourth one has reached the end of the line and I'll try and be real brief in summarizing those. First,
about three weeks ago FDA finalized guidance on voluntary labeling of genetically engineered foods. This is guidance that had been under review and development for many, many years, certainly throughout this administration. It was finalized and published. Folks should take a look at it. I think one interesting part of it was with respect to the terminology GMO. FDA, while expressing certainly not a preference for that terminology, stated that it wouldn't take enforcement action against a company that would choose to use a non-GMO claim on packaging assuming all the other requirements are met. That's something that had been out there I think for discussion and debate. FDA does not have prior label approval, similar to USDA, so the question of whether a company that used GMO or not was something I think had been dangling out there for quite some time.

The second train moving down the track is the USDA process verified program which we'll hear Dr. Morris from AMS discuss in a little bit more detail later this morning. It gives companies a tool if they choose to make a claim regarding GMO or non-GMO status or GE of a food they can do that working through the process verified program and get the USDA process verified shield associated with that claim. So, since we last got together in March for the workshop the first non-GE process verified program was submitted and approved by SunOpta, a grain company. So that is a new tool
on labeling that hadn't existed prior to the last time that we got together as a group.

The third train moving down the track although it may be perhaps a little more slowly and with less certainty is working happening on Capitol Hill with respect to providing statutory authority and guidance on labeling of foods. This is somewhat in response to the various state ballot and state law initiatives that have taken place including the Vermont law which was enacted and will take effect in July of 2016. There are a few other states as well, Connecticut and Maine have passed statutes although those require adjacent states to also enact a law for them to take effect. But Congress has been working on legislation that would speak to this. I think the question that Congress is trying to answer is whether there is a role for the federal government to either set some uniformity or a single program that companies would work from rather than multiple state initiatives. The House passed a bill this summer. The Senate is currently looking at the question. I think there was a considerable possibility that something would appear in the appropriations act. I think by all accounts that looks rather uncertain at this time. Although Congress does still have another week to complete that legislation it's certainly something we'll be monitoring very closely.
The last of the trains which is the one that has reached I think the end of the line for lack of a better term is regarding petitions to the executive branch to utilize existing authority to create a mandatory labeling program. The federal government had received at least four citizen's petitions over the course of this administration. Those were responded to on November the 19th and each of those petitions was denied by the FDA. The petition responses were signed by the associate commissioner for policy at FDA. They're each about 18 pages long. If you'd like we can furnish copies for you as well, actually 21 pages if you include the footnotes as well. But they provide a pretty detailed response as to why the executive branch doesn't believe either that mandatory labeling is legal or in adherence with existing statutory authority that the executive branch possesses or not feasible. So that would be something interesting I think for folks to take a look at if you'd like to.

The reason for this, I think, quick update was to state that with respect to the question of mandatory labeling and the executive branch using existing authority, that isn't something that we would view as a discussion ripe for progress for AC21. So, as we discuss the upcoming mission and mandate of AC21, labeling will not be part of that simply because of limited time and what we try to focus
on to actually have implementable results for the executive branch. We don't feel that labeling is one area that we can actually effect change from this committee. So that would not be part of our discussion going forward. So, that's a quick update, not to say labeling isn't an interesting topic for debate and certainly interesting conversation but just not one that we think we can bring an actual deliverable for the executive branch from that topic. So, Dr. Schechtman?

MR. SCHECHTMAN: Thank you. We're running a few minutes late but we have time for a question or two if anyone has.

MR. REDDING: Yeah, Laura?

MS. BATCHA: Mine's very brief and narrow, I promise. Doug, on the FDA final labeling guidance in terms of the clarification about not preference, the GMO acronym and non-GMO acronym but no enforcement, have you all taken a step back yet and looked at how that might influence or alter FSIS's current thinking on label approvals?

MR. MCKALIP: Yes. That is a discussion that's ongoing now that FDA has completed the release of their guidance. We have circled back with FSIS and they are looking at their meat poultry labeling regulations and guidance to see what interplay there is there. So, yes, that is a discussion underway.

MS. BATCHA: That's posted?
MR. MCKALIP: Yeah.

MR. REDDING: Greg?

MR. JAFFE: Michael, on the OSDP July 2nd memo the third item they talked about was a study of new GE or new technologies that are out there, DNA editing and so forth. And I thought they were going to announce an NAS panel or something to do that. It's been almost four months and I was curious if you have any idea about if or when they're going to make that announcement or if that's still going forward.

MR. SCHECHTMAN: That is indeed still going forward. It takes a little bit of time for the money to be gathered to be able to be transferred to the academy and the academy to be willing to do these things. So, we expect that that process will happen fairly soon. I know the academy is quite anxious to be, to be getting started. And I think they're in the planning stage of getting that process going. Okay, break?

MR. REDDING: Yeah.

MR. SCHECHTMAN: Let's take a 10-minute break and then we'll return with the next panel.

(Off the record.)

(On the record.)

MR. SCHECHTMAN: Welcome back. In this next session I and other USDA staff who've moved a little further
away from you here will speak to you about the actions the
Department has taken to implement the recommendations you
gave us in the 2012 report. For members of the public, the
report again is included among the documents made available.
As we go through this panel I will introduce each speaker as
it is his or her turn to speak. Can you hear okay on the
recording? Okay.

We won't be presenting every single thing we've
done. This is just to give you an idea of the range of
efforts USDA has undertaken on your recommendations, not
even quite everything listed in the document. But our
efforts have all been serious efforts, some perhaps more
successful than others, but we've worked hard to implement
the AC21's recommendations. This session will talk about
direct responses to your recommendations as well as some
additional things USDA has done in the general spirit of
fostering coexistence. You already heard mention of a few
of the key actions from USDA from Mr. McKalip. In this
session we'll go into more detail about a larger list.

There are a lot of items to cover, again, drawing from the
document summary of main USDA activities initiated in
response to the November 2012 AC21 report, again, which is
on the table. Some items will receive just brief mention
and others may get discussed in a bit more detail.

Some of your recommendations in different sections
were overlapping so sometimes we've arbitrarily chosen under which heading we'll do, we'll report on some of the actions. What we'll do is go through all of these items and then open up for questions. We'll talk about the four theme areas in the report, compensation mechanisms, stewardship and outreach, research, and seed quality. First, in the area of potential compensation mechanisms to address economic damage to farmers caused by unintended GE presence. There were a series of fairly complex recommendations in the report in this area and they were all linked together. One major statement in the report was that there was not consensus among AC21 members that there was adequate information that documented such losses, information that would justify establishing a compensation mechanism. There was not consensus at the time of our last work. Consequently, one recommendation was that USDA should gather such information and having that information the Secretary would determine based on that information whether establishing such a mechanism was appropriate.

As part of the overall package of recommendations the committee recommended that if such a program were to be established an insurance-type mechanism should be considered and it first should be tested using a pilot program. USDA has made initial efforts to gather this type of data about economic losses over the past year and we will talk about
that date when we get to the research section of this panel.

In another examination, though, of the overall issue around economics of coexistence we have also delved further into an analysis of that and Catherine Greene, an agricultural economist with the Economic Research Service, will speak about what ERS has done. Cathy?

MS. GREENE: Okay. Thanks, Michael. I'm actually going to not say a whole lot today about the report because we don't have it published yet. We are, we've been through external clearance and we are hoping to have it published in the next several months. We are planning to have it published in the next several months although we can never guarantee anything like that. The report itself examines, I'm just going to briefly say, the report itself examines the markets for GE differentiated production, the production systems themselves and to some degree the interplay between the GE differentiated markets and the GE differentiated production systems as well as a little bit on the practices used to avoid, if you're -- the practices used by organic and non-GE producers to avoid GE presence in their crops and we also examined, to the extent that we have data, the economic losses. So that's, really it's an overview, it's a synthesis and it's still sort of preliminary since we're still gathering data.

MR. SCHECHTMAN: Thank you. Further in the area
of compensation mechanisms, let me note one additional area of AC21 recommendations and some challenges posed for USDA. That other area was the recommendation that USDA develop a set of mechanisms to incentivize the development of joint coexistence plans among neighboring farmers that might be producing their crops using different production methods. So, there are these two important areas, compensation and joint coexistence plans. I need to note for you that our office of general counsel has informed us that we do not have, at this time, the legal authority to implement either a crop-insurance-like compensation mechanism, nor to establish USDA programs to directly incentivize the development of joint coexistence plans. So, those central recommendations may need to wait for future congressional action. We'll have more to say about some of this later in the meeting though. There were other important recommendations in this section about insurance and information available to farmers. So next we'll have Mr. Brandon Willis who is the administrator of the risk management agency speak about USDA actions to improve crop insurance options for farms not growing commodity crops. Brandon?

MR. WILLIS: Thank you very much. We've taken quite a few actions over the course of the last two years to try to address the issues that producers have brought to us,
the disincentive organic producers purchasing crop insurance. We've done it in two major ways. First of all, we've tried to fix, address some of the hurdles that we had in our current policies. We've tried to change the existing policies we have out there. We've also developed a new policy that works for all sorts of producers but it has some key components that work very well for organic producers.

Some of the changes that we made to our current policies to make them work better, in 2014 we eliminated a five percent surcharge. Organic producers historically had paid five percent higher for the premium than the other producers. That was eliminated in 2014. Another issue that producers also asked for was additional prices that reflect what they actually receive in the market, organic prices. In 2011, if you were an organic producer we had four crops where if you grew that crop and you lost your crop in a natural disaster you would be compensated at a price more reflective of the organic market. That was the first year we did that, 2011. This last year we added nearly just under 30 additional crops at organic prices. So today we're up around 56 different crops that if you produce those crops organically and you lose your crop in a natural disaster or some other event you will be compensated at a market price more applicable to what you would have received in the market.
The other thing we did, it's called the, it has kind of a chemical name but it's a very simple concept, the contract price addendum. Basically some of the crops that we would like to offer a contract or we'd like to offer an insurance price that reflects organic market we simply don't have the data available. In those cases those producers if they have a contract that has a price in it can talk to their crop insurance agent and oftentimes they'll be able to receive perhaps a contract price or something in between the contract price and what the market has. We started, I believe, the first year was last year, 2014, with about 60-something crops. This year we're at 73 crops. The latest information I had is around 10 percent of the policies utilize that new option. So, we have kind of a multi-prong approach trying to address that specific issue.

In addition, we developed a policy called the whole farm revenue protection insurance. It was available last year for the first time. It had about 1,200 policies were sold and this works very well because instead of looking at a crop by crop and you insuring every crop you insure all your revenue from your farm together. We tried to take some of the good aspects of a previous policy called AGR, AGR-Lite. This is something that the Chairman knows a lot about. We tried to take some of the good aspects of that program, tried to address some of the areas where
people didn't feel things were working like they should. And last year was the first year. We had some listening sessions, we talked to producers all across the United States and we made further changes this year. Why this works well for organic producers is because oftentimes they're receiving more per acre or a higher price than their counterparts are and the whole farm is based upon the individual's actual historical revenue. So, it helps on the revenue side, it also helps, we simply don't have crop insurance policies, whether you're conventional or organic, for many different crops, especially if you don't have many grown in a county. Whole farm, that doesn't matter, you're aggregating all your revenue. So it benefits on the revenue side. It also benefits if a crop insurance policy simply isn't available.

Moving forward, we'll continue to I think listen to people on whole farm. This is not a static process. This is a process we'll continually listen to people and make changes. That policy for the first time ever is available in every county in the United States, Alaska, Hawaii are included. It's not just lower 48. On the pricing side of things we will continue to expand there as we can. Thanks.

MR. SCHECHTMAN: Thank you. Thank you, Brandon. Finally, for this section, one additional action USDA has taken to help non-GE farmers get a better grip on market
pricing to help in their contracts et cetera, et cetera.

I'll turn to Dr. Craig Morris, Deputy Administrator of the Agricultural Marketing Service.

MR. MORRIS: Thank you. Starting on September 2nd we began publishing out of our Greeley, Colorado market news office a weekly report for food and feed grade corn and soybeans that are non-GE. That comes out every Wednesday.

The most recent report would've been December 9th. It's for a variety of different pricing mechanisms. It is a voluntary report so it benefits from voluntary participation. We've seen the depth of that report increase over time as typically new volunteer reports do. And we've also stated our intent that if additional commodities would be beneficial to the industry we could add those to it as well. It's covered through existing appropriations for a voluntary market news program. So if, one, you're not familiar with the report please let me know, I'll make sure that you can see it. But two, if there's interest in any modifications to the report or anything like that we can do it. It's not under our, what we call mandatory price reporting program which are much more rooted in regulation, through voluntary we have the opportunity to provide a variety of services that could be beneficial. Thank you.

MR. SCHECHTMAN: Thank you, Craig. Now, we'll turn to the AC21 recommendations on stewardship and
outreach. The major thrust of these recommendations was that USDA should spearhead a stewardship and outreach effort on coexistence and its importance working in conjunction with a broad range of stakeholders and also that USDA should develop a package of mechanisms that foster stewardship and help mitigate economic risks and foster communication and collaboration including things like best practices toolkits. That is my paraphrase of what was a very long recommendation.

One of the first actions USDA took in response to all of this was to seek public input through the Federal Register on how to foster communication and collaboration to strengthen coexistence. We published a notice in November of 2013 seeking input and received over 4,000 comments, relatively few of which directly responded to the request for information. Rather, most raised broad issues about the use of GE crops, the potential for coexistence to work as a general matter or the balance of equities among the different types of agriculture producers. A smaller number were just generally supportive of GE crops.

Of the relative few commenters who did provide specific responses to what was asked a frequent theme was the need to gather additional information in a range of areas. The document provided gives more detail about the comments that USDA received. In general though I can say
that USDA did not receive the response that we had hoped for from that information request. So, after some deliberation we decided to continue to broader discussion on communication and collaboration in a different way, by holding a stakeholder workshop to which all committee members were invited. It was an invitation-only workshop which was held on the campus of North Carolina State University in Raleigh, North Carolina on March 12th and 13th, 2015. At the workshop, USDA focused on activities either completed or under development or contemplated in response to the AC21 recommendations and we solicited comments from participants and members of the public in following weeks. USDA listened carefully to the views offered at the workshop.

I should say that we generally got positive feedback about the proposals we offered, many of which we're talking about here, but the meeting was not without controversy. We received some criticism for having an invitation-only meeting and at the meeting there were a few presentations from some eminent non-USDA scientists who offered some strongly voiced opinions that were controversial. We did not screen those presentations prior to the meeting. Following the workshop, we again solicited formal comments from participants and the public about our proposals. We got 475 responses to that request for comment
with most comments, again, opposing the growing production
and marketing of GE products and/or questioning whether
agriculture coexistence is even possible. But relatively
few comments directly addressed the policy proposals.

Several of the topics we will be reporting on here
did receive report among those comments that were directly
responsive. For example, work that you'll hear on assuring
the purity of germplasm resources and work on a range of
scientific research projects. There was relatively little
support for USDA proposals on development of an overall
outreach and education strategy on coexistence, on
development of farmer toolkits and for a new USDA website on
coexistence. There was a little support for the conflict
analyses that were alluded to earlier but some of those who
supported it felt that those should be mandatory.

The Secretary's office has taken all this input
into account in moving forward and in deciding to start up
this committee again. I should note that the website on
coexistence that we announced at the time of the
stakeholder's workshop is accessible online. It contains
background information, very general fact sheets on
coexistence and on different methods of production and on
best practices for production of different types of crops.
Again, what's provided there is very, very general
information and USDA welcomes input that would refine these
materials or additional items that may be useful to farmers as they address any coexistence challenges they may face. The website is www.USDA.gov/coexistence. So, not hard to find.

There are at least two other relevant pieces of information USDA has gathered or developed in this area that are worth mentioning. First, in response to a specific part of one of your recommendations, there are some informational materials that were provided at the Raleigh workshop regarding voluntary and outcome based strategies for facilitating production of identity preserved products. So, there was a document which includes discussion of tools such as pinning maps, grower zones, screenable markers, pollen excluding traits and procedures used in the organic industry to prevent comingling and unintended presence. Second, there are now some discussion documents developed by the National Organic Standards Board related to so-called excluded methods of which genetic engineering is one. Betsy Rakola, USDA's organic policy advisor, will discuss those.

MS. RAKOLA: I can take this one. Thank you, Michael. So, the National Organic Standards Board -- oh, was it not on? Okay, it's green? All right. Thank you, Michael. So, the National Organic Standards Board has had discussion documents in place for some time now. They are
still discussion documents, they have not gotten to the point of becoming recommendations for policy action to the USDA. Once the -- if and when the National Organic Standards Board does decide to make a policy recommendation to the USDA that is the point at which we could decide whether or not to take action on those and whether we would propose a modification to the organic regulations as they exist.

So, the National Organic Standards Board hasn't been able to make very quick progress on this because they have had other priorities, specifically looking at the very heavy workload of the 2017 Sunset Process to review a good number of the substances that are currently on the national list. We hope that they will be able to make some progress in the future that will provide some recommendations that we can act on. But the document is available for public view and the Board continues its work on that and we're very interested in any comments. I know that the Board is interested in receiving feedback from the public on this since it is a difficult question, particularly in the light of all of the emerging technologies that are coming out now. But I think the discussion going on within the NOSB is very similar to the one that is going on within APHIS in trying to modernize the definition of excluded methods in a way that will remain relevant and flexible as technologies
continue to change and emerge over time.

MR. SCHECHTMAN: Thank you, Betsy. As another stewardship tool for identity preserved producers USDA is offering, and this was alluded to earlier, USDA's agriculture marketing service has now made available the use of its process verified program to verify non-GE crops and process. Dr. Craig Morris will again speak to this subject.

MR. MORRIS: For some time AMS has offered the USDA process verified program as a way that sellers, buyers, or third-parties can ensure that products conform to standards through, one, the manufacturing system adopting very robust quality management systems and then having those quality management systems audited by highly trained USDA employees. In the last year or so we've seen relatively parabolic growth in that program for a variety of different marketing claims. The one that we announced back in May was the initiation of the non-GE, GMO program with SunOpta. Subsequent to that we've had a number of other companies with a range of other products trying to avail themselves of that service. This week we're auditing a soy milk facility that manufactures a co-packed product for a major retailer and we have a number of other commodities, canned corn, yogurt, processing aides for a dairy product manufacturer, a variety of other more retail-focused products that will be coming out in early 2016. So that program is, since SunOpta
obviously started with their food and feed grain, corn and soybeans has grown for us considerably. And so our auditors are working with the industry to bring those new products under that marketing program online.

MR. SCHECHTMAN: Thank you, Craig. Finally, in this area there was a recommendation about the potential use of USDA conservation programs where appropriate in promoting coexistence. John Englert, National Program Leader at USDA's National Resources Conservation Service, will now discuss that briefly. John?

MS. ENGLERT: Okay. Thank you, Michael. I want to talk just for a moment or two about kind of what we can't do but then talk about what some possibilities are within the, within NRCS to use conservation buffers for coexistence. NRCS has statutory authority to address natural resource concerns such as soil erosion, water and air quality, wildlife habitat. We've determined that we don't have the authority to use our NRCS programs to address genetic and gene flow issues. So, that's kind of, that's set in our statutory authority.

Secondly, with all the interest in using conservation buffers as a means to specifically restrict pollen movement, we've done a cursory look at some of the science behind using buffers for this purpose and there's a lot of variability and use of buffers specifically for
restricting pollen movement is complicated by a lot of different factors, topography, local climate, crop types, buffered vegetation and design. So, when we look at what's available within our standards for NRCS conservation buffers we don't have design requirements for restricting pollen movement.

So, just to reiterate again, so NRCS is limited in its authority and the available science to use conservation buffers as a primary means for coexistence is challenging. So, this does not mean that we can't use buffers to support coexistence. Certainly producers are already using buffers to reduce pollen transport. It just means that NRCS can't provide incentives for using buffers solely for the purpose of coexistence. We can use conservation buffers, or producers can use conservation buffers and NRCS programs to address other resource concerns such as soil erosion, wildlife habitat, things like that, realizing that there are additional benefits for coexistence. So, again, it would be a secondary benefit that a producer could obtain if there are authorized natural resource concerns for NRCS to incentivize use of that buffer.

And just a caution which I think is fairly straightforward though is that there's no guarantee that the NRCS conservation buffers are going to be no effective under level of effectiveness for, for controlling pollen
transport. So, you know, I guess good and bad on that and we're, you know, still open to using conservation buffers for authorized purposes.

One other item which might be of interest to this group is the new NRCS organic farming handbook which was released last month. It's available on the web if you search NRCS organic farming handbook. It's got a big, long URL so easiest way is just to search for it. There's certainly information related to using buffers for pesticide and pesticide buffering and pollen transport but it's in very general terms consistent with what I just talked about. But in addition to the use of buffers there's a lot of other information on NRCS conservation practices which can benefit organic farming.

MR. SCHECHTMAN: Thank you, John. Next we'll turn to the research area of USDA's recommendations and related efforts and we will start with the efforts that I eluded to earlier to gather date on economic losses by farmers due to the unintended presence of genetically engineered material in their crops. Again, Catherine Greene from the Economic Research Service will speak about this topic.

MR. GREENE: Thank you. All right, so USDA added a question last year on the National Organic Producers Survey asking farmers whether or not they had experienced an economic loss due to the presence of GE traits in their
crops and it was a fairly open-ended question, have you
experienced loss and when and USDA's national ag statistics
service published findings in a PDF online earlier this year
and they broke out the findings by time period, the most
recent being 2010 through -- I'm sorry, 2010 through 2014.
Actually, it may be 2000 -- yes, 2011 through 2014. They
also published several earlier time periods which had very
little, showed very little economic losses.

So, I'm going to tell you in general what those
losses were and in the way that we can kind of generalize
and then say what the limitations of the data are. In
general, 20, farmers in 20 states reported losses in 2010
through -- 2011 through 2014 and if you look at the
percentage of all farmers and all certified organic farmers
in the United States who experienced a loss that number I
believe is 0.65 percent. If you look at -- the 0.65 percent
is for all farmers, certified and exempt, it's 0.69 percent
for all certified organic farmers in the United States. So,
if you look at it as a percentage of all farmers in the --
all organic farmers in the U.S. it's not a huge number.

If you try to start honing in on, well, who are,
where are there states where you might experience a loss and
because those are the states that are growing GE, those are
the states that are growing organic crops or -- I'm sorry,
we just look at organic crops. Organic crops with GE
counterparts. The farmers in the 20 states, it's about one percent, just over one percent of all farmers in those 20 states experienced an economic loss. Then if you drill down to the percentage of farmers in those 20 states that experienced a loss you saw higher losses for some of those states. I think three states in particular had six to seven percent of their farmers experiencing an economic loss during the period of 2011 through 2014.

Most of the states were more in the one -- most of those 20 states were more in the one to two percent range and California which doesn't grow many crops, doesn't have a focus on the crops with a GE counterpart only had a 0.2 percent number for the number of farmers experiencing a loss. Illinois, for example, was one of the states that had a six to seven percent loss which again, Illinois is one of the states that grows a lot of crops that have a GE counterpart. So those are kind of the general findings.

Now I'm going to say what the limitations of the data are. The limitations of the data are that they, the data, we could not report losses by commodity and that's a serious limitation given that there are only nine crops in the United States that have a GE counterpart. So those are the crops that you would see the economic losses with. Another limitation of the data is that these are losses for organic producers in the United States. It doesn't, they
are not estimates for losses to conventional, non-GE producers who are growing identity preserved, non-GE crops and who are also subject to economic testing when they take their crops to be processed. And then one other characteristic of that data is that we ask the question just on economic losses so again it's just if they had crops testing positive for traits and not any of the costs take to avoid GE presence while they're producing the crops. I think that kind of covers it.

MR. SCHECHTMAN: Thank you, Cathy. I'll just add one thing that we are anticipating additional follow-up research in this area.

MS. GREENE: Yes.

MR. SCHECHTMAN: And now we'll switch and go onto some biological science topics. First to work on research relating to crop stewardship and gene flow risk assessment. I'll turn to Dr. Shing Kowk, national program leader at the National Institute of Food and Agriculture. Shing?

MR. KWOK: Can you hear me? Can everybody hear me now?

MR. SCHECHTMAN: Yes.

MR. KWOK: The Biotech Risk Assessment Grants program or BRAG for short is a competitive grants program that we administer through USDA National Institute of Food and Agriculture and the Agricultural Research Service to
specifically look at environmental effects of biotech organisms in the field. These organisms could be animals, insects, plants or microbial systems. And the priorities, the research priorities related to gene flow and coexistence have been on our request for applications for competitive proposals since 2013 and these priorities have been vetted through all three regulatory agencies, namely USDA Biological, Biotechnology Regulatory Service, the Environmental Protection Agency and the Food and Drug Administration. So we make sure that our research priorities are in full alignment with the needs that they have and to get them the information, the science-based information that they need to make the decisions they need to make regarding biotech organisms.

Since 2013 the priorities related to gene flow and coexistence have focused on areas of assessment of efficacy of existing techniques and how you can mitigate unintended effects of GE organisms. Also, we also fund research related to novel, development of novel techniques related to mitigating GE traits in a non-GE production system. So, from 2013 to 2015 we probably spent somewhere in the area of about $3 million in this area, roughly six projects with one conference which I'll talk shortly a little about. This $3 million budget is roughly about 25 percent of the total budget in that timeframe of 2013 to 2015. In the area of
gene flow and coexistence we funded three projects that are specifically focused on developing male sterility techniques, pollen flow, pollen confinement or containing trans genes within the plastids of plants. We funded projects that also relate to looking at the impact of GE traits on insect migrations for crops that are related to pollen flow and insects. We've also looked at, funded a project on control of seed dormancy and reducing fitness of GE plants in the environment as well as a novel approach to detecting GE organisms in the field, relatively low cost and quick method to do that.

In addition to these research projects we've also funded a conference that was held with the National Academy of Sciences. This was part of an 18-month study that the National Research Council was having related to GE crops, past experiences and future perspectives. That full report I believe will be available early 2016. So, the BRAG program funded a portion of that full study. It was a workshop on comparing the environmental effects of genetically and non-genetically crop production systems.

So, that's it.

MR. SCHECHTMAN: Thank you, Dr. Kwok. Next, research on landscape level gene flow in alfalfa relevant to coexistence in alfalfa production. We'll have Dr. Jack Okamuro, national program leader at the Agriculture Research
Service speak about these efforts.

MR. OKAMURO: Right here?

MR. SCHECHTMAN: Right there. You were a little behind me.

MR. OKAMURO: I was hidden. Thank you, Michael.

So, as Dr. Kwok mentioned, NIFA has provided funding for priority research in this area, Agriculture Research Service has provided funding for research in this area as well as the Office of the Secretary. So one of the early projects that we launched was on conducting research on landscape level gene flow in alfalfa. I have to express our appreciation to the National Alliance for -- sorry, the National Alfalfa & Forage Alliance Group for their support.

We receive a lot of support from industry to generate the data which is beginning to come out and be published right now.

So, USDA scientists have ongoing research projects to examine the movement of the Roundup Ready herbicide resistance trait in alfalfa in the field. We had three project objectives, one to assess the role of feral alfalfa in transgene transmission in the field, to determine the impact of pollinator behaviors on pollen mediated gene flow and three to analyze the flow of transgenes from Roundup Ready alfalfa seed production fields to conventional fields.

So, a number of these objectives, they have been written up,
they have been submitted for publication. One that has been accepted will come out in 2016, another is in review and the third is in preparation. In addition to this, so, you know, how do we communicate with the stakeholder-relevant parties, we've kept stakeholders appraised of progress on these objectives through meetings of alfalfa stakeholders throughout the last year.

Okay, so on feral alfalfa management the results confirm that genetically engineered alfalfa is dispersed in the environment. The data suggests that eradicating feral alfalfa along roadsides, minimizing seed spillage would be effective strategies for mitigating transgene dispersal. And this report is in review. Scientists analyzed 4,600 locations in three states, three counties. They detected feral alfalfa in about 400 of those and 26 of those 400 had transgenes in them.

On pollinated mediated gene flow, USDA scientists analyzed the inadvertent carry-over of GE alfalfa pollen in honeybee hives and in leaf-cutter bee domiciles. The, I think what was the most important, what was done was to compare the adventitious presence in the pollen versus what is measured in the seeds that are harvested, seed production from seed production fields. And although the rates in the seeds from the seed production fields were remarkably low there was transgenic pollen detected in the hives in the
domiciles of the leaf-cutter bees. So, the explanation for that remains to be determined and studied. But that will be coming out in the, in a paper in 2016 in Apidologie is the journal.

And finally on field to field transgene transmission, to better understand how landscape effects gene flow from transgenic to conventional alfalfa seed production fields the USDA scientists have been collecting seeds from different zones in 24 commercial seed production fields and alfalfa production fields. And that report is, the manuscript is still in development, so, but as I said before the preliminary data had been shared with the industry for their consideration. So, there will be updates following on that. That's what I have.

MR. SCHECHTMAN: Thank you, Jack. And I will pass the microphone back to you again almost immediately to talk about basic research on corn pollen germination to limit unwanted transmission of corn genes.

MR. OKAMURO: Yes. Okay, this one is shorter. So, USDA scientists have taken a genetic approach to addressing this issue. There are three genes that we are focusing on that can be utilized to mitigate the germination of pollen on corn plants. The genes are called GA1, GA2, and TCB and they've been introduced into -- well, 21 new lines have been developed for evaluation in the field and
those field evaluations will go on in 2016. So, still a
research in process.

MR. SCHECHTMAN: Thank you, Jack. The fourth main
area of the AC21 report was the topic of seed quality. And
we will now first address the major recommendations that the
committee made in terms of the maintenance of the purity of
USDA's germplasm banks. Dr. Peter Bretting, national
program leader at the Agriculture Research Service, will
speak about USDA's efforts. Peter?

MR. BRETTING: Can everyone hear me? Yeah?

Great. Well thanks very much, Michael. This group made
specific recommendations regarding the need for revised best
management practices to monitor and maintain the purity of
publicly held germplasm. And I'll paraphrase some of what
you said. The focus, the scope is on plant species with
commercially available or new genetically engineered
varieties to market. And the focus you placed on was having
plans, plans to monitor and maintain the purity and to have
appropriate best management practices to do so.

Specific items you mentioned, determine the
presence of plants with genetically engineered traits in
publicly held germplasm stocks, conduct ongoing monitoring
of unintended presence and have a plan to respond when
unintended presence of genetically engineered traits does
occur. So, in response to this and recognizing the evolving
landscape in plant breeding and genetic resources we
conducted an update and a revision of our current best
management practices. All of our gene banks and our
breeding projects have BMPs in place for ensuring trueness
to type. But when you're talking about genetically
engineered traits there are additional aspects have to be
taken into account. And our scope initially was on five of
the major crops that have substantial acreages of
deregulated traits. And those are alfalfa, cotton, maze or
corn, soybeans and sugar beets.

So that was the focus and I'm not going to go
through the BMPs and procedures and practices in detail but
I'll just mention the five major elements. The first quite
naturally is having the best management practices, make sure
they're well-documented, reviewed and accessible. Really,
if you don't have the BMPs in place all the other steps are
just essentially doing a diagnosis of what went wrong. So,
this is something we've tried to stress with our scientists.
Testing for trueness to type and purity at critical control
points. Mandatory testing of new varieties or enhanced
germplasm prior to formal release. If and when unintended
presence of genetically engineered traits occurs, guidelines
on how you mitigate those effects. And finally,
communication strategies to let people know what we're doing
as an agency to maintain trueness to type and also for
handling any future occurrences of unintended presence of genetically engineered traits.

So, these updated procedures and practices have been reviewed internally within our agency by more than 40 reviewers and by numerous external reviewers, at last count more than 50, including the National Genetic Resources Advisory Council. And they've also been provided as a courtesy to members of the AC21. I might also mention that these were written by gene bank curators and personnel and by breeders. So we wanted to have them take the lead in this because they would have to take the lead in adhering to them and making sure they worked. So, that's, those are my comments, Michael.

MR. SCHECHTMAN: Okay. Next we will very briefly touch on a recommendation regarding USDA's support for the Organic Seed Finder Database. Betsy Rakola will again say a few words here.

MS. RAKOLA: Thank you. We had provided a brief update on the contract that we had issued to support the Organic Seed Finder Database during the stakeholder session in March so we just wanted to provide a status update here today. The Agriculture Marketing Service did support AOSCA and the Organic Seed Alliance in supporting the continued development of that database and through that contract we received a couple of reports and a draft fact sheet from
them. In addition, the Organic Seed Alliance and AOSCA held a webinar that's now recorded and available on eOrganic talking about the requirements for the use of organic seeds under the regulations and how to use the Organic Seed Finder Database. They had over 100 people join in so we were very pleased with the attendance and the reach that that had. We are currently looking at the information in the reports and the fact sheet and pending departmental clearance we hope to be able to share more information on that in 2016. AMS also continues to engage with the seed industry more generally. We participated in June in the American Seed Trade Association's annual meeting talking to their committee about the state of the organic seed industry and what USDA is doing to support the sector and we look forward to continue to working with our stakeholders to support the further development of organic seeds.

MR. SCHECHTMAN: Thank you, again, Betsy. Next, to the recommendations the AC21 made regarding, work with the seed industry regarding the quality and availability of seed. USDA has had discussions with the leadership at the American Seed Trade Association about this issue and the head of ASTA, Andrew Lavigne, spoke at the stakeholder's workshop in March on this issue. Among other things, he noted the challenges for seedsmen to accurately forecast total annual commercial grain production and demand for
particular types of seed and that seed production for relatively small markets requires advanced planning. According to Mr. Lavigne, seed for specialized markets such as organic production is not produced absent specific, known demand. For such organic and non-GE markets and particularly for those crops for which most of the overall demand is for GE varieties rather than for organic or non-GE seed, ASTA has indicated that it is imperative that growers talk with seed producers well in advance of signing production contracts, at least a year ahead of planting, preferably longer.

On another line, ASTA also indicated at that time that it has efforts underway to develop a process to facilitate the licensing of elite germplasm for further breeding for non-GE markets. This effort, which is in line with one of the committee's recommendations, could bolster the availability of diverse, high-quality seed for non-GE producers. I hope to be able to update you next time on progress on that.

Now, finally, the AC21 made one other very specific recommendation that we will discuss here and that was that USDA task another advisory committee, the National Genetic Resources Advisory Council, with developing, quote, a plan in conjunction with the seed industry for ongoing evaluation of the pool of commercially available non-GE and
organic seed varieties and identifying of market needs for producers serving GE sensitive markets. Secretary Vilsack did indeed task the NGRAC with this charge and they have developed a report about which you will hear now. There is a PowerPoint presentation that was included in the meeting documents which you should now all have that will now be discussed by Dr. Bretting who, in addition to his other hats, serves as an ex-officio member on the NGRAC. Peter, once again, and thank you.

MS. BATCH: Anybody else need one? Three, four, five, six, seven --

MR. BRETTING: Thank you, Michael. I'll wait for the PowerPoint paper to be circulated. But first, I send greetings and apologies from Manjit Misra who is the Chair of the NGRAC. Manjit is the Director of the Seed Science Center at Iowa State University and in that capacity he travels tremendously widely, internationally, and he's on a plane right now en route, I'm not really sure where, I saw him in Chicago last week and he asked me to present this on his behalf. I'm not as an engaging speaker as him. So, but if you do know him just think of Manjit speaking.

So, the first slide has a list of the very diverse, hardworking group of the NGRAC, the actual members. And this is a federal advisory committee that was established in the Farm Bill of 1990 to advise the Secretary
of Agriculture and the director of the National Genetic Sources Program on the activities, policy, operation of what USDA's genetic resource program includes. So, it's not limited to simply plants. It deals with plants, livestock, insects, aquaculture species, microbes. But since it was rejuvenated in 2012, 2013 it's been charged by the Secretary really to focus on coexistence. And on slide three and some of you actually have a fourth updated slide, that's what the, the council has done in certainly the first four of its meetings. It's focused on the recommendations that you provided, focused on developing that plan and approach for having commercially available non-GE materials.

In its last meeting which was just about a month ago in Baton Rouge having more or less completed the coexistence task it began to pivot and to focus on livestock, aquaculture, insect genetic resources and also the genetic resources and needs of tribal nations. We have one of the members of the council is from the Tulalip Tribe in Washington which has, plays an important role in tribal nations in that.

So, going to slide five, a bit about the approach, the council examined issues at all stages of germplasm development, all the way from the relatively unimproved, highly variable materials in gene banks through the whole breeding process, characterizing and evaluating it and then
finally into the latter stages where breeder seeds are made available to seed producers and the harvests are provided to processors and consumers. The council focused on eight major crops, the five that I mentioned plus three additional, canola, squash and papaya. And this is a starting point, similar issues apply to, will apply to future genetically engineered traits and crops.

So, starting on slide seven are the recommendations from the final report of the NGRAC. The first area that was addressed was evaluating the pool of commercially available non-genetically engineered and organic seed varieties. Three recommendations, the first is really providing information about what's available. The second is increasing the availability, USDA working with plant breeders and other providers of organic and non-genetically engineered germplasm. And then the third, a study of just what is coming out of the breeding pipeline in terms of inbred lines or varieties at public universities to see whether it's delivering what the market and the consumer needs. And the council also suggested there be an assessment of the impact of the Bayh-Dole Act on public sector capacity.

The, going over to slide nine, the second area was identifying market needs for producers that serve genetically engineered sensitive markets. The council
requested that the USDA conduct an ongoing economic assessment of non-genetically engineered and organic seed markets that would enable those interested to understand the value and plan investment opportunities in the seed sector. The idea with more information, capital and support can be more efficiently applied. And the level of granularity is identifying the crop, identified by crop for each of those affected by the traits and focusing on the region involved, the acreage, the maturity with some of these crops, the maturity groups are really important for adaptation. The third area is ensuring that diverse and high-quality commercial seed supply exists to meet the needs of all farmers.

The first, the recommendation there involves regular meetings with appropriate representation on extending trait stewardship so it will encompass prevention and mitigation of adventitious presence, same as unintended presence, in genetically engineered breeding programs and gene banks. So this, an intersection of course with what I spoke to earlier. And the recommendation six is focusing on the need for relatively inexpensive and yet effective assays for genetically engineered traits. If you've been involved in testing for traits the expense can be substantial depending on specific traits and what level of tolerance you are interested in.
Continuing in this area three, diverse and high-quality seed supply, the council encouraged the Department to devote additional resources to essentially knowing what's in our gene banks and facilitating joint public, private sector efforts to do that. And this is certainly a major, already a major thrust of our national plant and germplasm system. It was pointed out that partnerships with tribal nations to assess genetic resources they have under their control would be welcome also.

Continuing in this area of diverse and high-quality seed supplies, the council wanted us to identify gaps in our collections, gaps in information, gaps in genetic diversity, taxonomic, eco-geographical gaps and where those existed to the extent possible make additional collections and add information. And this is a main thrust of our national plant germplasm system already. So it was good to see that validated by their recommendations.

Recommendation nine which is on slide 12, communicating to state seed foundations and to ASTA, American Seed Trade Foundation, excuse me, Association, the importance and need for inbred lines and foundation seeds that are not treated by chemicals that are prohibited by the national organic program. Apparently this is quite an important need for this segment of the market. And so those are the nine recommendations from the council. The last
slide is simply those of us that try to provide some support
to the council. And we're fortunate to have a staff to help
out with this. So, with that I'll turn it over to Michael,
and I think questions are the next point.

MR. SCHECHTMAN: Thank you, again, Dr. Bretting.
That's a very comprehensive report and I expect that once
it's officially, it's a report that members should be able
to receive at some point in the not so distant future. So,
there you have the high points of the things that USDA has
done in response to the committee's recommendations. The
work has involved a very substantial number of USDA
agencies. With that, we have about 20, 25 minutes left for
this session. We can open this time up for questions.

MR. KEMPER: Thank you very much, Mr. Chairman.

MR. SCHECHTMAN: Please announce your name too for
the transcribers.

MR. KEMPER: Alan Kemper. Thanks to everybody at
USDA and other agencies for responding and putting together
all the answers to some of the questions that we have. I
have numerous questions but I'm going to just ask one right
now. Brandon, a little bit on the crop insurance, how do
they sign up? Is it similar for the whole farm insurance
like 75 percent or 80 percent or 85 and then how do they
base their source of economic loss or gain on it? Is it off
of a 1040F or something? Could you just expound, expand on
that? Thank you.

  Mr. Willis: Yeah, I believe for whole farm they can purchase between 50 and 85 percent very similar to a normal crop insurance policy. They do use tax records to determine the income as well. So --

  Mr. Kemper: Okay.

  Mr. Willis: -- one of the issues, once in a while there's a group or two that whole farm's not going to work for them if they have, they're not completely honest on their taxes.

  Mr. Kemper: Okay. Thank you.

  Mr. Schechtman: Angela? Oh, sorry, sorry, Josette Lewis, please.

  Ms. Lewis: Josette Lewis. I have a question for Catherine Greene just to clarify my understanding of the difference between the work you've done to date and the forthcoming work. The newer report that will come out sometime, I think it's next -- well, you don't actually say when it's going to come out but the new work is looking much more broadly than just the losses to organic producers. You're looking at costs in terms of compliance and you're also looking at conventional and non-GE and not just organic sets, sort of the key differences between the past, the past survey and then the forthcoming research.

  Ms. Greene: That's right. We take a very broad
view of all three GE differentiated production systems and markets. We look broadly at the economic issues, we look broadly at the evidence and the findings to the extent that we have data or to the extent that studies have been published. There are still a lot of gaps. But, yes, we do address to some degree the costs for taking avoidance strategies and so forth.

MS. LEWIS: Maybe just a follow-up question. Do you have plans through the farm survey process both with the organics and with non-organics to continue collecting data and if you could speak a little bit to that?

MS. GREENE: Yes, we do. So, we don't have someone from NAS here today but NAS has several annual surveys planned primarily in conjunction with risk management agency to survey national organic producers in 2016 and 2017 and is just completing a 2015 survey. So, we indeed will have a lot more information on organic production via those surveys. And my agency, the Economic Research Service, has an ongoing survey program as well, the agriculture resources management survey, that we use to collect all of our farm financial data for all U.S. producers, make estimates of farm income, we also use it to make estimates of cost of production and returns in various major commodity sectors. So, we are over-sampling those sectors periodically with large over-samples of organic producers for a statistical
reliability and we reflect a little of that data in our, the report that's coming out hopefully in a couple of months. And we also have broken out a little bit of the non-GE conventional information on non-GE conventional producers based on that data as well. One downside of our ARM survey is that we're now only collecting commodity specific data every six, seven years and sometimes a little longer than that. So, in order to come back around to corn and soybeans and other crops that have major GE counterparts it takes a while.

MR. SCHECHTMAN: Angela?

MS. OLSEN: Thank you, Angela Olsen. My question also is for Dr. Greene. And first, really first a thank you and then a question. As an AC21 group we've often, many of us at the table have asked for data and so thank you so much for collecting that data on losses. And my question is sort of a deeper cut and it could be that there's a collateral survey or data that you've collected or it could be that it's in the next cut. But just curious so that we can really put it in perspective. I was wondering whether any information on the kinds of contracts that were entered into, in other words was it zero percent AP LLP, .1 percent, .5 percent. The reason I'm asking is at the table Lynn often refers to this as organic plus. So there's the organic and then there's entering into a specific contract
for a particular specification. And I was wondering with this data that you collected, I know it was a very broad question on losses, was there a deeper cut or was there a companion survey or something to put it into perspective to understand what kind of contract were these folks entering into as well. Again, just so that we've all got the context as we're looking at the data. Which again, thank you so much for doing that.

MS. GREENE: Are you asking specifically about economic losses and the survey that we just had, got data for in 2014?

MS. OLSEN: Yes, I'm asking about that but to the, and thank you for that clarification --

MS. GREENE: Yeah.

MS. OLSEN: -- question. You know, and/or to the extent is it going to be in sort of the next cut. But I was specifically asking about the report that did just come out on the actual, on the losses.

MS. GREENE: So, the report that just came out on actual losses, again, as I mentioned we weren't even able to report by commodity. The organic sector is a very thin, small sector still and it's basically every commodity spread out across every state. So, asking very specific questions about a limited number of crops that have GE counterparts that may be experiencing economic losses, it's sort of not
surprising that we're not getting enough data to overcome
the confidentiality requirements that we have for reporting
that data. I think the questions that you're asking are
much more, a much more granular level of what producers are
actually having, what levels of GE traits producers actually
are expected to meet in, with the contracts that they're
entering into, is that right?

MS. OLSEN: It was just, just again, another cut
of the data is really what I was asking. If there's, we
have the data of the losses --

MS. GREENE: Right.

MS. OLSEN: -- and it was just more that deeper
cut of there were losses but what were they tied to, was
somebody entering, you know, a commodity obviously would
be --

MS. GREENE: Right.

MS. OLSEN: -- very helpful but then also were
ey they entering into a contract that was zero percent AP LLP
or .1 percent as a group so that we can put that in context
or was it .9. Again, it's just more I guess, you know,
originally I was a scientist before becoming a lawyer --

MS. GREENE: Okay.

MS. OLSEN: -- so I just look for data and was
just curious.

MS. GREENE: We did not ask that level of detail.
MS. OLSEN: Okay. Thank you.

MR. SCHECHTMAN: Okay. I think David was next.

Is your card still up, Alan?

MR. KEMPER: Yeah.

MR. SCHECHTMAN: Okay.

MR. KEMPER: It's up again.

MR. SCHECHTMAN: Okay, okay. David, then you, then Lynn. Please. I'm sorry, Isaura, sorry, sorry.

MS. ANDALUZ: Okay, this question is for Brandon. So, for example, I mean, we haven't, you know, just looking at crop insurance as a compensation mechanism, so my question is, you know, I'm not sure what the qualifications are for someone to offer crop insurance. But for example right now, you know, we have Monsanto who now offers crop insurance as of 2012. So I'm just wondering that, you know, in this, what we're looking at here is the person who, you know, sells a product that contaminates it is now also selling insurance that's supposed to prevent us, to compensate us. I'm just wondering if you were going to be thinking about how to define who would be able to sell crop insurance or not.

MR. WILLIS: As far as who sells, we have I believe at the current time around 17 companies. When we decide who can sell, who can't see we look mostly to financial. In other words, they have a really bad year, do
they have the capability to make sure that the farmer gets paid and do they have the infrastructure. That, it's obviously a more detailed process than that but those are the things we look at. There's been quite a bit of movement quite frankly in the industry with some people coming one year and going in a few just because of the last few years have been a little difficult on crop insurance companies with some prices and some droughts. But we focus more on the economics of it to make sure the farmers get the insurance they need.

MR. KEMPER: Mr. Chairman, may I help Brandon address that just a little bit? As a producer we have a choice of various insurance companies to insure our crop insurance with. Those have to be approved by RMA as the contracted type carrier for that product. Mine particularly I changed but this year I'm with Great America crop insurance. And so the producers actually have a choice and I didn't realize a biochemical corporation had an insurance like a Monsanto like she said. So maybe I'm correct and maybe Monsanto does offer it but I didn't know that.

MR. WILLIS: A few years ago they were involved in one capacity, yeah, yeah. John Deere has been the same way, they're no longer involved.

MR. KEMPER: Right.

MR. WILLIS: But that's what I was alluding to,
some of have come and some have gone in the recent past as well.

MR. KEMPER: Right. Thank you, Mr. Chairman.

MS. ANDALUZ: So, Climate Corp is no longer selling?

MR. WILLIS: Climate Corp has been purchased, my recollection -- and I apologize --

MS. ANDALUZ: No, that's all right.

MR. WILLIS: -- because there have been a lot of movements.

MS. ANDALUZ: Right. So I'm just asking, so Climate Corp is no longer selling crop insurance?

MR. WILLIS: I believe they've been purchased by a company in the recent past.

MS. ANDALUZ: Yeah, they were purchased by Monsanto. Monsanto purchased --

MR. WILLIS: No, no --

MS. ANDALUZ: -- Climate Corp.

MR. WILLIS: -- there's been a lot of developments since then.

MS. ANDALUZ: They've been purchased by someone else again? Okay.

MR. SCHECHTMAN: Okay. Next question, back to -- someone else there that I don't see?

MR. KEMPER: Okay. Just another question on the
survey. First of all, that's for doing that. But it sounds like not only we do not know what crop was raised or surveying or suffering a loss, we don’t even know what percent of economic loss on that producer? Basically the organic producer just checked yes, they had a loss, or no they didn't, is that, my understanding correct?

MS. GREENE: Actually, they did report the amount of economic loss.

MR. KEMPER: Okay.

MS. GREENE: And again, the only thing we can calculate based on the data we're able to publish is a very general number which sort of dilutes the impact on the producers that are actually experiencing the economic loss.

MR. KEMPER: Okay.

MS. GREENE: So, I mean, from the economic losses that are reported that number is online.

MR. KEMPER: Thank you.

MS. GREENE: Okay, and I'll just kind of express it one more time why we can't report the crop-specific information. The surveys that USDA collected, the producer surveys that USDA administers, everyone that uses those surveys has to sign a memorandum of understanding that we won't release any, won't release any data that could potentially identify a producer and with serious penalties if something like that happens. And for, again, for this
really thin, really spread out, really small market, every state, every commodity but still not that many producers, for a really specific question like economic losses due to unintended GE presence, there aren't going to be that many growers making those responses and we just didn't, we couldn't overcome the confidentiality requirements.

MS. RAKOLA: And just to briefly add to that, NAS is very aware of the difficulties when they do have to suppress so much data and so they did actively look at ways of making some tweaks to their methodology for the upcoming survey in the hopes that they will be able to publish more information publicly and that there will be less that they have to suppress in order to protect the confidentiality of the respondents.

MR. REDDING: Leon?

MR. CORZINE: Leon Corzine. Dr. Greene, still to you, I really appreciate your efforts. I understand the difficulty. I mean, this is a big hill to climb to try and gather information, the confidentiality that everybody on the farm likes to maintain, tough. So we appreciate that. But as you further vet that out I think we'll get things that are probably even more useful and as you develop the next survey a question I had or a suggestion, if you are going to try to get information on and include what cost a person incurs besides what, going beyond what a threshold of
a particular contract might be, that along with those costs should be something on what was the purity level. I think that would be important because, for example in our own case, when we look at identity preserved contracts and we do a number of those with different levels depending on the seed purity that's needed for seed production or white corn or food grade contracts varies a lot the added costs that I incur on what that purity level is that I'm guaranteeing. For example, some seed contracts I talk to my neighbors and see what they're producing, on how much of a setback I have to have, you know, those kinds of things if you're going to be able to get something meaningful on what those costs are I think you would really need to also have in that survey what those purity levels that, of the contracts the producers are trying to achieve. Okay? Thank you.

MS. GREENE: Okay, thank you. That's a great suggestion.

MR. REDDING: David?

MR. JOHNSON: David Johnson. I guess my question would be probably best for Peter or maybe for Michael. And I guess I'm trying to understand when we have petitions that go to non-regulated status. At what point is the assay, the genetic assay, made available to the industry or the public? At least in the case of alfalfa I know there was a new petition approved in the fall of 2014 but others in the
industry or the public didn't have access to the assay that would be used to detect for that trait. So I'm trying to understand how BMPs can be in place especially when you're working through notification and permits that are generally done several years prior to non-regulated status. And I'm wondering if there's regulatory authority to have that in the petition or how that all really shakes out in the end. Because that becomes an important issue on developing all of this.

MR. SCHECHTMAN: That's a really good question and I think that has evolved over time. I don't want to give you an incorrect answer, so let me see if I can report back to you tomorrow on that question and get you the more specific information about the current state of affairs on tests. I believe they need to exist. The question regarding availability, I'm not sure that that is anything that is, that there's a general practice on wide availability for that. I think that's market demand but let me get information for you on that.

MR. REDDING: Laura, then Lynn.

MS. BATCHA: Thanks, Russell. I just want to follow-up on some of my colleagues' questions to you, Cathy, on the survey. And again, I appreciate the work you guys have done and I know how challenging it is to collect the data. I think I have some specifics but before I go into
that I do want to just take a step back and acknowledge that this was one of the places we got really bogged down as a committee last go around and it's almost déjà vu to begin that discussion again -- is that better? To begin that discussion again day one reconvening. The place that we got hung up when we went to draft that final report, at least in my recollection, as a participant was on this. I think we all came to a common understanding that genes were flowing and presence was there but we broke down as to whether or not economic losses were happening as a result of that in terms of developing a consensus view. And that was that if losses are happening clause from the Secretary's original mandate to us.

So, you know, I do want to acknowledge that USDA has gone back, asked a question in what is their, arguably their premier vehicle for collecting farm data and determined that in fact losses are happening. So, we can get bogged down in the details quite a bit of this but I want to, at least from my view that's what's transpired since we've last gathered and so I think that if losses are happening question for me at least USDA has brought data to the table that now the questions are about, in what form, how much, how much matters, these other kinds of questions. I think the commodity specific question, you've heard it from everybody, I think that's going to be so important
And my understanding of the survey, correct me if I'm wrong, I think the question on losses sort of came later after sort of the filling out of the rest of the form on a commodity by commodity basis so that question wasn't imbedded in the track that got you on the commodity questions in terms of volume, yield, et cetera in the survey. And so I'm sure NAS is looking at that but there's only a handful of crops with counterparts. And so if those questions around losses are made as an imbedded question when you're in the commodity itself that may resolve it because there is enough data to produce and share information about volumes and values of those comparable commodities in most states without them being zeroed out because of the confidentiality. So, I encourage you guys to look at that.

And then my last point about it was the aggregated number was over $6 million, I think high $6 millions, nearing $7 million in terms of what was reported. The survey asked for sort of a look back so it was like a time series but it was one set of questions at one time and that number was considerably lower when people were reporting before the 2011, 2014 series. So that's notable to me. And I think, Cathy, you probably know the figure but the per farm average was what for farms that reported loss?
MS. GREENE: About $70,000.

MS. BATCHA: Okay.

MR. REDDING: Laura, anything else?

MS. BATCHA: (No audible response.)

MR. REDDING: No? Len?

MR. CORZINE: The comment and question are focused on Craig. First of all, merchandisers that work for my company tell me that your voluntary price reporting has become the standard for unbiased pricing information and price discovery is difficult within markets. I'm curious, though my company cooperates and volunteers for that program, do you ask us what we mean when we define what we'll pay for organic crops and non-GE crops because there are differences in the price we'll pay at different levels of adventitious presence.

MR. MORRIS: Yes. In the voluntary reporting program the reporters are a bit more of an artist than they are a scientist. And what they're trying to do is to make sure that they're reporting like products in those various categories of the report. That's why we have, we've got different grower bids, grower spots, different points in the marketplace. If we're seeing too much variability around the price, the price spread is too wide, often that is, it indicates to us that we're not necessarily cutting that as discretely as we can. So, help us understand if you feel as
though a lot of the data that you are reporting is finding its way into a report with too wide of a spread and then we can begin to cut that data a little thinner. Because we do recognize that any time we start a new report and we've done it and we've had grass-fed beef and some of these real niche commodities, when we start it's a really wide open report and over time we're able to find that specificity to really report things that are really not only unique to the commodity but as you had pointed out the testing thresholds, locations, those sorts of things. We just need more participants in the report because we hold ourselves to essentially the same guidelines the ARS was talking about earlier.

MR. REDDING: Mary-Howell?

MS. MARTENS: Mary-Howell Martens. Okay, as an organic grain producer I do want to thank all of you for putting as much effort and attention into our needs as organic farmers. I realize we're still a niche market, a small market, and it is refreshing and impressive and inspiring to see USDA doing so much for a relatively small market. So, you know, this is coming from the heart, thank you. Especially the market pricing information, I use it, I report in every other week and I also use it to help set my prices. So, you are providing a useful service. My question is, on the alfalfa research that you're doing as
far as gene spread out of the alfalfa, the GE alfalfa, seems to me that with good science this could be used as a model system to assess the risks for other, how fast, where the spread is being detected, but also to determine where control points are where it could be stopped for similar models in the future. I feel like one of the things that kind of crept up on everybody was the spread of Round-Up resistant weeds which could've been predicted just based on reasonable models of evolution. Is this information on the alfalfa, spread of genes and the impact on non-GE alfalfa populations, fields going to be put together in such a form that it could be used as a predictive model?

MR. OKAMURO: So, thank you for the question. In terms of models there, in the last report that I mentioned there are models that are described in terms of maintaining distances between seed production fields for genetically engineered and conventional and organic based on the data that's been accumulated. So that will be published. And as I said, continuously through this process we've been sharing it with the industry, the information that has been collected. I think there are, and as the research will show there are mitigating factors determining on the populations of pollinators for example which are affecting the degree of gene flow. Some simple solutions for example in terms of feral alfalfa is the use of herbicides to control weeds
along the highways. So, the reason these haven't been
eliminated is because the herbicide that's being used is
Round-Up to eliminate weeds along the highways. And so if
different herbicides were used then the feral situation
would be cleaned up. So, there's some very practical
solutions that could be implemented.

MR. REDDING: Alan?

MR. KEMPER: I just want to publicly thank John
and NRCS for getting back with us on what programs are
allowed and not allowed for coexistence. And I heard a
couple things that producers, you didn't say it but what I
heard was producers need to get on the ball and have
Congress authorize some possible programs that would help
NRCS make coexistence a better thing. So thank you.

MR. REDDING: Michael?

MR. FUNK: Yeah, this is again comments for Cathy
who seems to be one of the most popular members up there.
And also responding to Laura's point that the economic
losses were a huge issue when we last were together. And
I'd just like to make the point that I think the information
that you're collecting, while it's really helpful, it's
understating the problem in many ways because as probably
most people know the organic standard is a process-based
standard and the incidence of, you know, AP presence of GE
material doesn't exclude one from selling them to the
organic market. So, if someone doesn't create an economic loss just because they have some AP. Now, the change in the market is that more and more people are demanding testing to at least a .9 percent is the general. And so I'm aware of a number of let's say corn growers primarily who have not been able to hit, they're organic corn growers, have not been able to hit a .9 percent standard but yet are still able to sell into the organic market and to other, you know, other channels and therefore not losing any, not having any economic loss. But it doesn't really identify that the problem is still there, right. They're not able to grow and hit a .9 in this example. And more and more of the future looks like additional testing is going to be required. So, I think the losses could potentially be much greater as we see more testing. Thank you.

MS. GREENE: Yeah, that's an accurate assessment.

MR. REDDING: Barry?

MR. BUSHUE: Is that on? Yeah. I'm just curious, how do losses reported by -- I guess this is for Catherine. How do the losses reported by organic growers compare with losses reported in other reports by IP growers or does any of that data exist?

MS. GREENE: I'm trying to turn my mic off. Okay, so we have not collected that data to date, although we do plan to ask those questions directed toward the IP, non-GE
market, again in our kind of infrequent commodity surveys. So, hopefully we will have some USDA data eventually if not sooner that can answer that question directly. I’m aware of basically one study in the United States done by an economist at the University of Missouri who I believe made a -- well, I don't believe, I know that Dr. Kalaitzandonakes made a presentation -- okay, I butchered his name.

MR. SCHECHTMAN: Dr. K.

MS. GREENE: Dr. K made a presentation at the AC21 meeting in March and he did present some of that data. Unfortunately I don't believe he has published that data. So, I can't cite it or give you a good, give you a good link for checking it out. What I recall from his presentation of that data in March is that he broke out IP growers growing quality traits, non-GE conventional producers growing for IP markets, both producers that were growing IP quality traits and producers that were growing non-GE traits for the GE differentiated market. And at the lower levels the number of producers that were non-GE, non-GE economic losses that had experienced non-GE economic losses were similar to the IP producers that were growing quality traits, about I believe it was one to two percent. Then if you ask, and then he asked apparently whether they had had two or more or three or more and -- two or three or more and for those upper levels of experiencing economic losses multiple times
I think the non-GE IP producers did have more rejections multiple times than the GE quality trait producers.

MR. REDDING: Isaura?

MS. ANDALUZ: Well, I asked about that study because I was at that conference because some of the numbers just didn't quite make sense to me. And that survey, what it is is he used several surveys. It wasn't just one survey so those numbers really need to be looked at really clearly to see if the information really is what it reflected. Because it was two, it was at least two independent surveys.

MS. GREENE: Yeah, I totally agree and again, I conversed with Dr. K after the workshop and he was, he had not published this data. As far as I know there's not imminent plans to publish it and he couldn't give me findings that were publishable for the report.

MR. REDDING: Final call. Barry, you have another question?

MR. BUSHUE: Oops.

MR. REDDING: Keith? Okay. Let's -- Michael?

MR. SCHECHTMAN: I'm going to ask a question after we get off of, out of the official --

MR. REDDING: Okay.

MR. SCHECHTMAN: -- if you want a, if you want a break I'll ask a question.

MR. REDDING: Yes. Let's say thanks to the panel.
Just an observation, you know, when we were together each of the points addressed in terms of recommendation I think have been touched on here today and I think we can certainly appreciate the complexity of the issue and the challenges. But think of the conversation we were having previously where there really was some question about what was being done, right, and I think we can look at each of the recommendations and each of the representatives today and really be thankful that we were engaged in the conversation. While you always want more please know where we started, right. And I think now you can at least have an intelligent conversation about some of these points that before were simply questions raised and some wonderment around what was actually being done at the federal level. So, very pleased to have the exchange today. One interesting point, and this is sort of in contrast, if you go back to the March stakeholder meeting and some of the opportunities that we have provided for public comment around education and communication is that there hasn't been and maybe wasn't a lot of support for some of the education outreach directly to farms which I find sort of interesting just because that was a point that we had led with in our report three years ago. And three years on that there is still a need for that. As I listen to the conversation today there is a need for that direct engagement and some of it may be in
understanding some of what is presently being done,
certainly by recommendation and work. So I guess I just put
that down as a marker is that as we continue the work of a
committee and certainly to the USDA is just keep
underscoring that outreach directly to the farm agribusiness
and the supply chain system, right, the technology providers
as well as consumers about what is being done at the federal
level. So, again, thank you to each of you for the good
work. I appreciate that. Michael?

MR. SCHECHTMAN: Okay. So, that will conclude our
morning. And once we're off of official taping of the
session I just have a question for the folks that are around
the table of who would like, who is planning to go out to
dinner this evening with us so I can get a number for the
restaurant. Can I have a show of hands? Okay. Thank you
all very much. And we will break until 1:30 and we will be
back. Try to be back promptly at that point. Thank you.

(Off the record.)

(On the record.)

MR. REDDING: Okay, good afternoon. Welcome back.
Thank you again for being here, pleased with the morning
collection and exchange that we had. We were into some of
those conversations that brought back some flashback
memories of conversations of three years ago but good
conversations. So thank you very much. And again just to
note the USDA's good work over the last three years and that
was demonstrated in the last six months but particularly in
the last couple of hours where we had a chance to really get
into some detail and I know there will be some, as reported,
additional reporting out here as we go forward in some other
sessions. So thank you. Just to note to welcome the
Commissioner, welcome from North Dakota, good to see you,
good to see you, Doug. Thanks for being here. I think the
one person we're missing is Marty. So, any --

MR. SCHECHTMAN: He indicated that he's ill.

MR. REDDING: Oh, okay, so --

MR. SCHECHTMAN: Yeah, I just got a message.

MR. REDDING: Okay, got it. All right, because he
had noted that he would be here. So, okay, with that I
think we're going to pick up on the afternoon session,
right? Okay. Do you want to do the introductions?

MR. SCHECHTMAN: Good afternoon again, everyone.
We're going to pick up on the agenda right on time to start
off at least. And our first topic will be a review of
ethical requirements and standards for the AC21. And we
will have Mr. Andrew Tobin who is the Deputy Director of the
USDA Office of Ethics will be speaking to us.

MR. TOBIN: Do I need a mic?

MR. SCHECHTMAN: You need a mic but these are
wireless mics so you can grab one if you want.
MR. TOBIN: How about now? All right, perfect.

My name is Andrew Tobin. I'm the Deputy Director of the USDA Ethics Office. I'm here today just to sort of give you a 20,000-foot view of the ethics rules. You folks are here for a very short time with us. I know you have a very important mission. I can tell because I walked in and saw Doug today. So if Doug's here that means it's got to be fairly important. But stop me if you have any questions as we go. Like I said, this will be pretty brief. I just want to give you sort of a lay of the land of how the ethics rule work, both for full-time federal employees like myself and then special government employees and representatives. And I understand most of this body is composed of representatives. So, but like I said as we go if you have any questions please let me know.

We're a fairly small office of about 20 that's charged with servicing the entire Department from the Secretary on down. We review all financial disclosure reports, provide advice, do training like this. So we have sort of a varied mission. It's great to have a chance to sit in front of you and talk to you about these things today. So, first we'll start with what is a federal advisory committee. It could be established either by statute or by order of the President or an Agency official. In this particular case it was created I believe by statute
and the Secretary's reauthorized it. But the idea here is that we want to obtain advice, recommendations and other perspectives from folks that we don't have within the federal community. So the idea is that we have a specific set of issues, you folks are here to tell us about what you think and help us guide, help guide us to provide programs in a better to you.

Here's why I'm here specifically. So, in 2004 the Government Accountability Office which is sort of the watchdog for the legislative branch that reviews executive branch programs issued a report providing guidance for agency ethics offices regarding advisory committees. And basically they went through each department and found that the procedures with regard to federal advisory committees were lacking. They weren't getting ethics advice on time, they didn't know who their designated agency ethics official was, and they didn't understand how to appropriately apply the ethics rules. So the reason I'm here today is to sort of give you, like I said, a brief overview, give you a point of contact if you have any questions as you go, just sort of be here as a resource. And at USDA DAEO is my boss Stuart Bender, the Director of the USDA Office of Ethics.

Here's a little bit of background. So, prior to 1962 there was no separate designation for representatives, SGEs. But during the Kennedy administration they basically
found that there was a need to bring in perspectives from the outside to draw in experts that we couldn't retain either because they weren't willing to come work as federal employees or might otherwise have a bias. So the idea was to sort of bring in folks from the outside. And in 1962 they sort of created this tripartite division of folks and advisory committees. So, there's basically three different options for folks that are sitting on advisory committees. First one are the full-time federal employees like Doug and myself and Michael. Second are representatives and these folks are not considered to be employees at all. You're essentially here to provide your perspective and the perspective of an outside organization on an issue that matters to us here at USDA. The third is sort of a hybrid. Special government employees, they are sort of a halfway point between full-time feds and representatives. So they have sort of a hybrid application of the rules which we'll talk about in a second.

Full-time feds I think everyone's fairly aware of. These are folks that work more than 130 days in the year, so more than 50 percent of the working days in the calendar year. We are all compensated for our service by the federal government and therefore we are subject to a number of criminal conflict of interest statutes from bribery, representation, conflicts of interest, post-employment dual
compensation, all those kinds of things. We are also
subject to a myriad of rules for executive branch employees,
the standards of ethical conduct. They cover things like
gifts, attendance to outside events, political activity,
those types of things.

A representative is not considered to be a federal
employee. You folks are not compensated by the federal
government for your service beyond travel expenses. You
represent the specific interest of an outside group or an
outside industry. Essentially we expect you to speak on
their behalf, you're appointed for that reason. To give you
an example of a group, you could be here to speak on behalf
of maybe a biotech industry, labor union, consumers, any of
those kinds of things. Although the vast majority of
representatives we have on advisory committees are
considered to be experts in their field they're not
necessarily appointed for that reason as representatives.
As representatives we don't expect you to speak on your own
behalf from an unbiased perspective. We want you to present
the perspective of the group that you're here to represent.
So it's sort of a just little bit of distinction there is
that although you do have the educational qualifications and
the background to be considered experts you're not
necessarily here for that purpose. We expect you to provide
sort of a biased opinion.
And here's why that's important. So first we want to have the outside perspective we talked about before a minute ago. In many cases you folks are the sort of people on the ground who can help us understand how our programs are affecting folks in the field. You can tell us how we might be able to deliver services better, that kind of thing. The reason you're here too is just so we can hear directly from you. And what the ultimate goal of helping us improve the way that we're delivering services and help us drive our policy forward in the best direction.

Representatives, like I said, because you are not considered to be federal employees you are not subject to the criminal conflict of interest statutes. You're also not subject to the standards of ethical conduct. But you should be aware that because your names are out there, because you're here today, because you're working on such important issues that you are sort of in the public eye and therefore you need to be careful of how your actions appear to an unbiased member of the public. So just kind of keep those things in mind as you go that even though you're not subject to the same rules I am you should be aware of how the appearance of your work here and the information you provide is going to be perceived.

If you're a representative you should fully and immediately disclose to Michael any potential conflict of
interest you have. Although it's not required we may recommend your recusal or disqualification if a particular matter involves someone close to you. So, including your spouse, your minor child, a business partner if you have an outside business, that kind of thing. And that's really more applicable for some advisory boards that have actual grant making responsibilities and review responsibilities. Because when you can see you have, when you have an action you're going to take that's going to have a direct and predictable effect on an outside party, an individual, you can see how that would be a problem. You folks are working on sort of more broad based policy issues. So I don't expect any of these things to be a problem for you. But like I said, it's always good to bring it up in case you serve on advisory committees in the future to have maybe a more narrow calling. An example there would be say a business owner should disqualify herself from serving on a committee that reviews grant applications if her own company or firm has submitted a grant. So, again, even though this conflict of interest regulations won't apply to you directly you can see how the appearance of that will be negative and that it could call the entire, call your participation into question. So those are representatives.

A special government employee is, like I said, that sort of hybrid category. It's any officer or employee
of the United States who's retained as needed, appointed or employed to perform without compensation for not to exceed 130 days during any 365-day period. So, essentially you are below that 50 percent threshold and you are here to provide your expert perspective and your independent advice. So, an SGE, unlike a representative, is here to say, I believe this, I have examined this particular issue and here's my guidance. A representative is here to speak sort of on behalf of the entire group. A SGE is here to speak on his or her on behalf as an expert. As far as specifics, you work on a temporary basis not to exceed 130 days of service in any 365-day period. Unlike representatives, SGEs are under the supervision of federal employees, full-time federal employees while they're acting as SGEs. And under August 2014 guidance from the Office of Budget at the White House these folks are not to be federally registered lobbyists. That's one of the big focuses of the Obama administration has been on limiting the influence of lobbyists in the executive branch. Each political appointee is subject to the ethics pledge which is very focused on lobbyists and their influence and this is just one more extension of that is in the federal advisory board appointment process.

Special government employees are required to submit the OGE 450 Confidential Financial Disclosure Report.
So this is a confidential report meaning it's only reviewed by our office. And basically what it does is disclose your outside employment relationships, your stock holdings, any sort of third-party involvement you may have from a financial interest perspective. They're all required to receive annual ethics training and they're subject to the ethics laws and regulations while they're acting as SGEs. So basically because they're expected to have employment both here and in the outside they're only subject to the federal ethics rules when they're actually on-duty performing duties as an SGE unlike us full-fledged federal employees who have the rules follow us when we leave at night.

Here is sort of the basic idea, is that if you're an SGE, if a matter comes before the committee that involves your financial interests or the financial interest of someone close to you, so again we're talking about your spouse, minor children, any organization where you're a board member, officer, that kind of thing, you should not work on it. Essentially what we're looking for when we review those financial disclosure reports for more than 15,000 people at USDA is any potential overlap between your financial interests and your official duties here at USDA and your case on the advisory committee. Here the relationships, your sort of inner circle are considered to
be yours. So it's not just your own stock portfolio, it's also that of your spouse, your minor child, your employer on the outside or your perspective employer if you're negotiating for employment with an outside organization, your general partner and any organization where you are an officer, trustee, or general partner. So essentially where you are a fiduciary for an outside organization their interests are considered to be yours and you need to be careful working on matters that affect them while you are wearing your SGE hat for lack of a better word.

Here's the matters that count. Like I said, I don't think you folks will be working on too, too many of these things. But we're talking about sort of matters where you can identify who is going to be directly affected by your work on that matter. So, if you're working on a grant or loan application you can clearly see that the applicant is the one that's going to be affected there. Contracts, you're talking about the parties that are entering into the contract. Litigation, anyone who is on that sort of plaintiff, defendant side. Any judicial proceedings, request for rulings determinations. So you folks again are working on sort of the broad-based policy issues and helping us to sort of guide us forward in how we move policy-wise. So you're not going to be working on these kind of matters so I don't think you are really much of any cause for
concern.

But just sort of look at a couple examples before we move on. Jim is a member of the National Urban and Community Forestry Advisory Counsel, NUCFAC, that's actually an advisory counsel for the Forest Service. His wife is the president of City Leaves Incorporated. So let's say City Leaves submits an application for a creative and innovated project program grant which NUCFAC administers. So, can Jim evaluate and score the City Leaves application as a special government employee on that particular advisory committee? The answer is no because his work could directly affect his spouse and his spouse's employer. He should recuse himself from looking at that particular application. We would advise him he probably shouldn't review any grants under that particular program because any action he takes that could affect competing organizations would affect his wife's company.

Here's the second basic, if you work on a matter as an SGE you are then barred from representing any other party back to the federal government for as long as that matter exists. So let's say Jim, the NUCFAC member in the prior example, and his fellow council members awarded a $1 million grant to Arbor, Incorporated in 2012. In 2013 Arbor's CEO contacts Jim and asks him if he'd be willing to contact a Forest Service district ranger to increase the
size of the grant. So, should Jim do that? So, first question is, did he work on this matter as a special
government employee. The answer is yes. Therefore, he's
restricted from contacting any federal employee on behalf of
an outside party with regard to that matter he worked on
personally and therefore he should not contact the Forest
Service district ranger. Again, these are matters that
would be sort of more narrow than the stuff you're working
on here so I wouldn't worry about it too, too much.

Gifts, federal advisory committee board members
can obviously accept gifts that are not offered as a result
of their board membership. You're not required to reject
holiday gifts because of your status as a board member.
But, any gift that's specifically offered to you by an
outside source for your service on the federal advisory
committee would call your actions into question and should
generally be rejected. If anyone offers you a gift based on
your advisory committee status please get in touch me with,
we're happy to review it for you. But, anything that's
offered because of your private position, your life away
from your USDA work is not going to be a problem.

The other thing that may come up for you folks is
that you cannot receive additional compensation for
teaching, speaking, or writing that relates to your official
duties. That essentially means that if someone asks you to
come give a speech about your work on this particular committee you can give that speech, you cannot receive additional compensation for it because essentially you're already being compensated by the government for your service here. But again, anything you're doing that is completely separate from USDA is not going to be a problem. But again, if anyone has questions about that happy to review them or if you get speaking invitations related to this please get in touch with us. We're happy to move forward there.

Here's what we consider to be relates to official duties. We're talking about your duties as a board member, anything that draws on any non-public information that you may acquire in the course of your duties here. If there's indicia that the invitation was offered based on your board service or if the invitation is from a source that would be substantially affected by the performance of your official duties here, which again I don't think is going to be an issue either.

Here's the upshot. You folks are here to provide your perspective and your expertise on the matter that's very near and dear to the Secretary's heart I know and is very important for the future of agriculture. So, don't let an ethical problem derail the good work you're doing here. If you have any questions here's how you get in touch with me. I'm happy to walk you through any questions you may
have. Like I said, you folks are not an advisory committee
that sort of sets off any alarm bells for our office
because, again, you're working on sort of the broad-based
policy issues. But, I do appreciate Michael letting me come
through and say hello to everyone. Does anyone have any
questions before I -- go ahead.

MS. MARTENS: Just one question. Since we were
here before three years ago there's been a rather large data
leak at the Department, probably foreign espionage of some
sort. And our identities were part of that. What are you
doing now to protect us better?

MR. TOBIN: I specifically am not doing anything
different. Our CIO's office I know how really upgraded the
access to our computer systems. I know everyone basically
has to use their PIV card now to access any computer
department-wide which was not in place before. My
understanding was that OPM was breached, I'm not sure about
USDA. It's a little bit outside of my preview, but as the
sort of repository of all that information they were
affected.

MS. BATCHA: I got a notice, just yesterday.

MR. TOBIN: Yeah, essentially anyone who's had
their background looked into was affected by that breach
including Michael and I, Doug, and you know, all the, so
we're as concerned about it as you are. Anyone else have
anything? All right. Thank you very much.

    MR. SCHECHTMAN: That was this mic, right?

    MR. TOBIN: Yeah.

    MR. SCHECHTMAN: Yeah, I think I broke this one.

    MR. TOBIN: Well, that one works.

    MR. SCHECHTMAN: Okay. Thank you very much.

Okay, so ready to get onto the next topic. Any questions about anything before we move on to the new charge? Okay. Let me turn then to Doug McKalip to talk about the Secretary's thoughts for where we're going.

    MR. MCKALIP: Thank you, Dr. Schechtman. I'm going to switch gears and hopefully this will help to trigger us for the next day and a half over discussions of the future direction, mandate, and charge for the AC21 committee. I think probably the best thing I can do is to be as brief as possible because any time without direction I think too many words tends to be actually more confusing. So I'm going to try to be very succinct and I'll turn it back over to Michael to discuss some sort of key questions for us to think about as a group this afternoon and tomorrow.

    Just an observation, I think a lot of the work from this morning was very clear in terms of what AC21 has accomplished so far and what USDA has done as a result of that work. And a lot of it has been sort of federal
actions, whether it be, you know, reviewing the germplasm, changing the crop insurance program, looking differently at how conservation programs can be applied or the research initiatives, data gathering, ag marketing, you name it. But we haven't really talked about the really most critical link and that is at the farmer level, at the farm, in between farmers. And Secretary Redding had mentioned just a little bit ago how important, you know, communication and outreach has been to discussions AC21 has had so far. But there's a bit of a gap maybe in sort of how that translates down to the farmer level on farms. And so we have been thinking a fair amount about this and you'll hear from Secretary Vilsack tomorrow afternoon about this in greater detail as well. But have been thinking about that shared responsibility among farmers, between farmers, among all of us and farmer communication was very central to the report that AC21 had issued.

So looking at that, I think our thought process there has been that this really gets into an area that goes well beyond what we would be able to sit here, next year, as USDA and present and say, you know, mission accomplished. Instead, it requires a lot of work to take place at varying levels, whether it be state, local, NGO, that conversation, that communication about farmers exists at certainly a much broader level than just USDA. And there's only so much that
USDA even could do if we wanted to within existing authorities that we have. So, we are very interested in looking at the conversation of how joint coexistence plans can be developed at the local level, how state and local entities of government and non-government can play a role in that process, and what the federal government could do to facilitate and to help be an enabler of that process. Because again, I think there's only so much reach we've got with farmers and between farmers but with the state and local contacts that are out there, the relationships that exist, there is a tremendous capacity and potential to help develop that farmer to farmer coexistence planning and work between folks at the local level.

So, we think this is a really important question to look at, for the AC21 to address and to come up with recommendations and ideas for us. And I think, you know, the idea here is to help preserve and insure diversity among agriculture, to help ensure that every farmer out there is able to meet their production needs, their market needs to be able to develop the type of crop and be successful in a market place that they are after. So, with that, again, I wanted to be as brief as possible, hopefully not to say too much. I think the concept at least as USDA has thought about it and the Secretary has is fairly straight forward. It's something that we're hoping that, you know, within a
year's time we can have deliverables and very clear guidance
to come back for us on. And with that I'll turn it back
over to Dr. Schechtman who's developed a series of questions
that we're hoping can help be a guide post for our
discussion this afternoon and into tomorrow as well.

MR. SCHECHTMAN: I'll start off by just passing
out statements of what this charge is. So, I'll just read
or you'll have the statement in front of you in a minute.
But basically we're asking, is there an approach by which
farmers can be encouraged to work with their neighbors to
develop joint coexistence plans at the state or local level
and how can USDA, how can the federal government assist in
that process.

So this is a charge that is not talking about
where we started before, a program for assessing damages and
collecting them but about encouraging cooperation. We're
talking sort of in the primary instance about incentives,
educational tools or programs but if you want to in addition
you could conceivably include tools or models for states or
localities to use in resolving disputes or sets of preferred
practices. But we want to be focusing this, again, more on
the state or local level. So here are some, a few suggested
things that you might think about in figuring out how to
address this.

What tools or incentives do states or localities
already have at their disposal to encourage neighbors to work together. Are there existing programs or models that states or localities could build off of. Might this entail some general public outreach or some type of program that might be established at one local level or another with incentives. Would you want to make any sorts of recommendation as to what types of officials or other local folks might be involved in any of these conversations. Is there a need for some types of general discussions that might be set up on this topic that state or local officials might mediate. Is there any useful role for state or local officials in dissemination of coexistence best practices. Is there some particular kind of structure that states or localities might be encouraged to set up to aid in their efforts. Should these discussions involve anyone down-stream from local farmers in any way, for example, for information purposes. And then of course what role might USDA have in helping whatever approaches you recommend succeed. And what tools might USDA bring to aid states and localities in putting these programs into place.

So that's sort of a general set of questions. Tomorrow, later on in the meeting we'll ask you to consider what other information you might need from us as you continue on your deliberations about this and whether you think it might be useful to set up any working groups to
gather any of this information for the next meeting. And perhaps by the end of this meeting you might also might think about what form you might envision your recommendations taking, is this going to be a full report, a brief set of recommendations, this is entirely up to folks in this room. So that's just sort of the brief description of what we would like the committee to consider. How do we get more work together by farmers at the local level to address these issues. And with that, we'll open it up to questions or thoughts.

MR. REDDING: Alan?

MR. KEMPER: Michael, Alan Kemper. I appreciate --

COURT REPORTER: Your mic is not on.

MR. CORZINE: You need green. Think John Deere.

MR. KEMPER: Oh, I can't think John Deere.

MS. LEWIS: Just touch it once.

MR. KEMPER: There we go, thank you. And first of all, I can't think John Deere, we're all Case IH on our farm. With that -- so, sidebar on that one. I appreciate the charge, Michael, and the word coexistence has now picked up a whole new definition in agriculture in the last 12 months. Due to the financial crunch and crop crunch that has gone on in agriculture as we go into the '15, and '16, and '17 crop years the coexistence between organic and
conventional and GE is one thing but the coexistence just between modern agriculture is another. You have a lot of young farmers scraping the barrel to find financing over the next two or three years. You have gentlemen retiring trying to do a transition and get coexistence. So I just want this group to be cognizant. Sometimes inside the Potomac, inside the Beltway you don't really understand what's going on out in rural route 2. And this coexistence thing is going to have two or three definitions as we go forward over the next couple years due to the crop conditions and the oversupply of crops in the U.S. Thank you.

MR. REDDING: Angela and then Ron.

MS. OLSEN: Mine I think will be easy. There are just two process questions. First, Michael, you read a series of helpful questions. I was furiously taking notes as you were doing them. Is that something you plan to hand out as well, is the first process question. And the second is in terms of coexistence, we know how we define coexistence in our 2012 report. Is this new charge, coexistence of all forms of agriculture or is organic and GE or again is it open to all forms? I think I heard it's open, it's all forms of agriculture but I want to be very sure about that before we take on the charge. Just a scoping question.

MR. SCHECHTMAN: Yes, we haven't changed the
definition. So it's the same. And with regard to your first question, I do have that list of questions in my briefcase on a separate sheet and I'll pass them out as well and put some up front.

MS. OLSEN: Just back to the, is it all forms of agriculture or is it, I'm sorry to ask the question again, but just to be very clear, this charge is not just GE and organic or is it all forms of agriculture?

MR. SCHECHTMAN: Correct, it is not just GE and organic.

MS. OLSEN: Thank you, Michael.

MR. REDDING: Ron?

MR. CARLETON: Thank you, Mr. Chair. And when I think about existing models or ways of potentially getting at this or taking a look at I'm thinking of something that I know the Chair may be familiar with and others that we have at EPA with regard to promoting state-managed pollinator plants. The idea being that you're bringing a diverse group of folks that should have some common interests to try to improve communication and outreach, in this particular case, bee keepers, pesticide applicators, producers, local communities, you know, the state, a variety of folks who the idea is to bring them together to develop some opportunities and some ways to facilitate communication on this particular issue. So that's the first thing that strikes me when I
hear this is how similar that is, especially if you're
looking at a, sort of a locally managed I guess approach.
So I just make that as an observation at this point.

MR. REDDING: Ron, good point, we'll come back to
that just in terms of the requirements I think for states
and what we're being asked to do. So that's a good
suggestion, thank you. Mary-Howell?

MS. MARTENS: Just thinking about our
neighborhood, to be honest I think there's relatively little
the federal government can do. However, there is something
that since the federal government is in the business of
allocating money I think this is really important, it came
up before, and I think that I still didn't get a good sense
that that was one of the things that has been addressed in
the past three years, especially based on what the NRCS man
said. Do we have good feedback on whether the, quote, best
management practices achieve the goal of preventing gene
flow from one farm to another. Do we have the genetic
studies, do we have the data to show whether these best
management practices are effective.

MR. MCKALIP: I think that's an excellent point.
And certainly the research that is happening on alfalfa that
was outlined earlier will help us further there. We
actually, through the National Advisory Forestry Committee
that we have at USDA, put a fellow this summer just full-
time on literature review on gene flow reduction based upon windbreaks and shelterbelts. And that process yielded a very positive result just in terms of feedback of it certainly doesn't exacerbate gene flow and clearly a tree line, shelterbelts, and windbreaks do have moderate effectiveness in reducing pollen movement. There's certainly a lot more data we need to collect in that regard. It would help inform the best management practices and the conservation handbook that NRCS utilizes to then fund EQIP projects and so forth, easement programs and the like. But I think I've just maybe stated a little differently than it was in our panel discussion, it's very important that the national handbook that NRCS does now includes unintended presence because I think it's an important tool for farmers that are looking for ways to limit gene flow to utilize those conservation practices that can be cost shared even in some cases up to 90 percent to install those practices. NRCS will always want to see a connection to another natural resource concern, whether it be water quality, wildlife habitat, air quality. I think that's pretty easy to make that connection even if your primary objective is to limit gene flow. So, it's going to be up to us I think to market and sell that and drive the demand for it. I've never -- well actually let me restate this. It's going to be difficult to have the program be marketed for that purpose
and as others have stated earlier, having Congress step in at some point, that's a question that I think will be out there. Should clear authority on gene flow be written into the conservation programs. That's a question I don't know that we can answer around this table. But I think with what we do have we have a real opportunity and that is to encourage producers to look at these practices and whether it's on the limiting gene flow coming in or limiting it going out I think there's certainly an opportunity here that we didn't even have six months ago when we were at the workshop. I think a lot of progress has happened. We just need to keep it moving in that direction.

MR. REDDING: Maybe -- oh, you've got a question?

Because I'm just going to plant for Lynn and Leon the question of private contracts certainly is a piece of this, right, because there's already things happening in the marketplace that offer some producer, you know, assurances and agribusiness assurances so I just ask you to be thinking about what of is currently the practice in the field could be pulled into this conversation here for us in terms of models. But, Isaura, do you have a question?

MS. ANDALUZ: No, I'm just going to, I mean, this is not going to work in New Mexico.

COURT REPORTER: Your mic's not on.

MS. ANDALUZ: Okay. Is it on? Okay. This is not
going to work in New Mexico because Monsanto flat out told us that they couldn't tell us where the GE crops were planted. I mean, this is something we've been dealing with for a long time. We've met with them several times. And then there was also coexistence meeting right before we had finished our project here New Mexico State Department of Ag had a coexistence meeting. And I thought, maybe it's related to this. So, again, it was the same thing like what happened in March, no one knew who was invited, it was invitation only, we went to this meeting, it was Monsanto and DOW was there, all their attorneys were there, the lobbyists were there. And in New Mexico, you know, you have NMSU developing the genetic chili we've been fighting against and we tried to find a way that they would let us know where the test plots were planted so we could protect our farmers, right. So what happened now, they passed a law where we couldn't call our chili New Mexico. Well, we don't call our chili New Mexico. Now they passed a law where we can't call our chili's unless it's -- even by their varietal names because they reference a geographic area unless we register with Department of Ag. I mean, so it's like, you know, every time that we try and work something with the state, you know, or Monsanto, you know, they came in and the same lobbyists for the bios and for Monsanto is also private counsel to our new governor. So I don't see how there's
anything that we could do in New Mexico that would improve this coexistence.

MR. REDDING: But this is between producer and producer, right. So, you're going to have --

MS. ANDALUZ: This project, they can't, if David is growing GE corn and I'm here next to him, David, Monsanto does not allow those people to tell us what they're planting. We know because we know what the crop looks like, right, but they're not allow to talk to us. You'll have to talk to the biotechs about that. I mean, that's a huge problem we have.

MR. REDDING: Yeah, and that may be the case. That wasn't my understanding. I mean, I think it's to individual producers have that responsibility or can talk but not, maybe not companies disclosing what individual producers are producing. But I think in this discussion here, what could be done between producers, okay, assuming they can talk to each other and are encouraged to talk to each other what could be done in terms of conservation practices potentially between these producers. Leon?

MR. CORZINE: Leon Corzine. Thank you, Mr. Chairman. A couple things. Rather than reinvent the wheel, we have a lot going on farmer to farmer in the countryside already and we talk a lot about corn but also soy and we have been, like I've mentioned, involved in seed production
which is very tight. And a lot of times it requires us
talking to the neighbor to see what he's going to grow
because it's going to affect the type of buffer strip that I
need, what he's going to have next to me or across the road
or down the road. Anything I've been involved in, and we've
grown regulated products, it's not a deal that we are, have
to be so secretive that we can't talk about, hey we're
growing this product. And I don't see that it's necessary
that you get specific with what product, it's just how much
of a, how much of a tolerance are you under so what kind of
practices do you need to use. And I, I think as far as best
management practices there is a list when I signed a
contract what I am required to do.

And so I would expect or I'm fairly confident
there's a lot of data out there as far as what these best
management practices do because this really isn't new. Seed
production, for example, maybe that's an earlier one, I
think it's a good example, has been going on for a long,
long time. And I guarantee you, the seed industry, and it
doesn't matter, I mean, everybody wants to pick on Monsanto
but it doesn't matter if them or it's Pioneer or if it's
Beck's or you name them, right, if it's a regional or if
it's a local seed company, they've got a darn good idea what
kind of purity they're going to get for the BMPs that they
request. So, some of this, to answer these questions it
seems to me would just be a matter of data gathering, you know. And I don't think there's anything that secretive about that. And so that's kind of where I am on that one.

And because we pick out what we want, what we think will work and it gets, economics definitely get into it. And that's why I asked the question of Dr. Greene on the survey is if you're going to request, as some have, that costs to meet the contractual obligation is going to be included you need to know what that contractual obligation is, you know, because we have some things that may have to be grown under .2 percent, right. It's a lot different than if we're growing five percent or 10 percent. So that's the point in all of that.

On another matter, I actually wanted to raise the question, I have concerns on broadening the scope of NRCS too much because there's a limited amount of funds, there's a limited amount of sign up times and land that's available and we get involved in some of that. It's not just there's a huge pile of money and hey this is something that we can do for convenience. We actually had some buffer strip things that should've been there but part of it because of funding didn't qualify. And there you're talking about water quality and things that are really, really known, okay. So I think anything we go to messing around too much with NRCS programs we can cause a lot of unintended
consequences in that. Thank you.

MR. REDDING: Yeah, thanks. All right, Lynn?

MR. CLARKSON: Alan, which one of these things have got a green light?

MR. KEMPER: John Deere?

MR. CLARKSON: Lynn Clarkson. The real life tolerances that we deal with and functionality are down to one part, well, one hundredth of one percent. And while green companies hesitate to take a a in loco parentis attitude toward farmers, we'd rather tell them what the goal is and let them deal with it themselves, it would be considerably more efficient if we knew where challenging crops were being planted. And while farmers do talk to each other the timing is often not well placed for good purchase decisions or production decisions. And in the part of the world that I work in mostly which is Illinois there are some absolutely outstanding county offices of the USDA that it would be very helpful for buyers and other producers to see on a map of the county where certain things were being raised.

Now, to sort of split the load with Monsanto I'll pass it over to Syngenta and then we get into high-amylase corn which is perfectly legal to raise. And that's the one that gives the American Food Corn Processing industry absolute fits. And we're going to see more of that and my company wants to stay at least a mile away from any planting
of that corn. And originally it was very difficult to find where that was. At the encouragement of the American Seed Trade Association it is now easier for us to find where these plantings are, that would be helpful. From a buyer's standpoint if we saw that there was an area of a county perhaps backed up against a river so you've got a protective barrier for transfer, would we offer a premium to a bunch of people in that area to get it? We probably would because we would have to reject things and we don't like to reject. We would like to receive 100 percent of what we're contracting for. So, we would be delighted if county offices would offer a map, not mandatory necessarily but voluntary, so farmers could say what they were raising. It would be helpful to us in knowing where to contract.

MR. REDDING: Latresia? Thanks.

MS. WILSON: Latresia Wilson. I guess my questioning goes along with what has been said. But what resources are available? Are we able to, the existing programs and resources, are they available in answering those questions? Are those the kind of things, you know, as what we're looking for?

MR. MCKALIP: Yeah. I think it's really part of what we're asking here is that if we are to have more local conversations farmer to farmer, local governments, state governments playing a role in this and I would suspect that
there will be, you know, state resources that are part of this as well as some local, what can the federal government do to facilitate that. And so that's really part of what we're looking for feedback. We don't expect you to have the answer today but that'll be something we're really interested in getting the AC21's thoughts on is is there a federal program that could be used in a different way than it is today. Maybe there's a trade-off for that. Maybe you're, you know, want to divert resources from what it's already working on. Or is there a new federal program that needs to be, you know, tailored to that purpose.

But I just want to get back to, and I think we had President Kennedy's picture up here during the ethics thing. We're really interested in what can happen locally because, again, we feel like the most valuable work on the farmer to farmer piece is it will happen locally. There could be some federal resources that are part of that but interested in what can happen at the local and state level in this regard.

MR. REDDING: Thanks. Laura?

MS. BATCHA: Laura Batcha. I first want to acknowledge, Doug, you made it right in time for the state and local conversation so welcome. I haven't gotten to say hello to you yet. I think on this topic it's hard to even get started on because, you know, it's sort of a big idea. And so for me I'm really looking forward to learning from
the folks around the table and from some experts that we bring in about models at the state and local level. So I think at least early on in our process those sort of case studies would be really helpful for me. I'm interested in learning more about the sort of internal workings of the state level pollinator programs, et cetera.

But a few things that came to mind for me first on this is I will sort of reiterate my support for the idea that Mary-Howell raised which is the way I think about it is if we want to think about what's the best way to deliver tools for coexistence plans we have to have some confidence that that curriculum is sound and will produce the intended outcome through those best management practices. So, I know we talked about that last time. But that's sort of a starting place for me that if a lot of energy is going to be put into delivering this type of information that we know that there will be some impact from it.

Assuming that that's taken care of, I am really interested in the idea of integrating these best management practices into the NRCS handbook, not to distract from the core objectives of NRCS in terms of water quality and conservation, but as a way to create a cross-reference for farmers to see, you know, the additional benefits and help guide people to make choices. So I’m initially supportive of that idea.
And then right away when you started working through this concept I was thinking about our conversation at lunch, Lynn, and the whole idea of diversity and having successful relationships in any kind of diverse environment, it's always helpful to know who's amongst you, right. I think that's for me a real starting place to focus on ways that USDA could potentially facilitate, whether it's voluntary using technology, whatever it is, this idea of mapping what's going on amongst your neighbors. So just so that you have some guidance as to who to even talk to and what the risks are and different traits are going to have different tolerances and different best management practices. So, what tools do you rely on, so I think a big piece of this at the beginning is creating some kind of system for that information to be shared.

MR. REDDING: All right, thank you. Doug?

MR. GOEHRING: Thank you, Mr. Chairman.

Interesting that probably about several months ago we started working on this to some degree conceptually and it was to help producers look at transitioning, understanding that they may have started out in a certain way, farm their land in a certain way and some of them want to explore doing some things different. In the state of North Dakota we have about 12 different microclimates and regions and it supports about, oh, the production of 50 different commodities
commercially across the state. So we have all different types of commodities being produced and all different types of practices all the way from conventional down to no-till. And we have a lot of organic production, we have seed production, we have identity preserved production that goes into Asia more specifically and we have conventional and biotechnology as part of that whole system.

But in this concept, visiting with some in extension they wanted support from the ag community to look at can we put a person in place to help producers and/or young producers understand some of the inherent risk and some of the challenges. And that may mean going from a conventional operation into minimum till or no-till or it may mean somebody that wants to transition into organic production needing to know that there are experts we can tap out there but there's also some things within that county, within that township that they may need to know and understand based on the topography, the soil, the climate, and gain a better appreciation and understanding and then try to tap and have access to all those different experts out there. For example, someone like Lynn, maybe they want to go and find somebody that they could, you know, broker their crop through.

We started on this and we are preparing to bring this to the legislature probably in about a little over a
year. But it seems like it's right along the same lines because we've already put some of these models together or programs and tried to work toward some of this. I did it in another program this last year here where we created the pipeline restoration reclamation program because we have so much in pipelines going in the ground and we have so much disturbance and so many issues and I remember a lot of the town hall meetings that we were putting on there were land owners, farmers and ranchers asking, why don't you just, why don't we just have a law that says you have to reclaim and it has to be as such.

Well, the problem was we didn't recognize that everybody had differences and once you go around the room and you start finding out what type of farming practices you have, if it's pasture, range land or whether it's crop land and what type of farming you do it all makes a difference. And there was no way to write law or legislation to meet that. But after we got done that program exists for two reasons. One, to hold those accountable that have put pipe in the ground and try to come to some reasonable solution and secondly, to reclaim or restore. But secondly was the education and communication component of it and that probably has made the biggest difference, giving people the information, the tools, the resources to understand what do they need to look at before they do something. So in many
ways I think some of this already probably exists out there and I believe and I'm confident I think with all the people and the resources we have around the table we can probably come up with some stuff that's going to give some flexibility and latitude to do this.

MR. REDDING: Good, thank you. Alan?

MR. KEMPER: Thank you, Mr. Chairman. The commissioner always speaks so eloquent and then I follow him and do such a poor job. But there's two or three things I want to bring to the tables attention. One is there are various methods to deliver a good, sound system like Mary said. You need to have your facts in order and hopefully a consistent method throughout the country as you deliver it. I mean, you can look at the American Farm Bureau Federation and their young farmers and rancher programs throughout the country could easily facilitate meetings around the various counties. You have to look, and I'm going to come back to this two or three times over the next couple days, that coexistence is really going to have trouble from the next couple years. You talk about NRCS and that's a great, a great system to maybe put information out but they also have created the have and have-nots of American agriculture with their watershed programs where they reward some farmers $50 an acre and a mile away the farm that's competing against him for operational land is not being compensated $50 for it
because he's in a different watershed even though he's got very similar problems in making filtration work for his farm. So you have a little trouble there. Extension always keeps saying, you know, what, they always seem to be looking for a mission but their mission actually is serving American agriculture and they could be the vehicle that would be more like a neutral source to host the meetings than a cattleman's group or a soybeans group where you actually have volunteer farmers leading that that might be competing for cash rent or various farming operations. So we do have some systems.

My question also for this group, you have a field watch, drift watch and other vehicles that farmers can use to pinpoint various organic grapes and other things that are very sensitive to chemicals and crop protectants. How do we expand that or how can we make that in all 3,000 counties or whatever across the country? That would be voluntary that could pin where those IP fields are and such. So, just a lot of questions, Mr. Chairman. Thank you.

MR. REDDING: You're on the right trail. I mean, I think the objective here was to try to open up the conversation and say you've got a pretty broad, you know, objective and that is, what can we do to encourage, you know, the joint coexistence plans. Which, you know, decode it means encouraging farmers to talk to each other, right,
to simply, you know, try to eliminate or at least minimize, I mean, the issue of adventitious presence, right. So you're trying to do that. How do you facilitate that and if there are models around pipeline work and intrigue with it, if there are crop protectant, if there are other systems I think we're trying to just get a good inventory, what is out there. And if it's pollinator or something else, I mean, let's try to sort of pull those together and look at them and say, if the objective is what we've just stated in terms of the farmer to farmer and minimizing those sort of market disruptions what do we do absent a law, right, absent clear authority to encourage that maybe using federal programs but the emphasis here I think is more on sort of local, state, other. So let's keep all of those conversations on the table. That's what we want to hear. Lynn, I think you were up next.

MR. CLARKSON: Thank you. Mr. Kemper touched on it and one thing that had come to mind is extension service. And like Alan mentioned, you know, they are kind of looking for a cause. There's been kind of a, a lot of it has been funding issues with the land grants and things around extension service. They've had, they have struggled and loss some of their influence I would say in my part of the world. But it is a mission that I think they could take up and keep it on that, I like your idea, Doug, of the local,
state level things because that's where it needs to happen. Even in my state we're really diverse from one end of the state to the other, let alone when you start going across the country. You can't plan something that's going to work in New York for Mary-Howell that's going to work for me in central Illinois that's going to work out in Doug's North Dakota area. So extension services might be a way and you know, with the way things are the land grant universities and extension service are sorely lacking of funding. So, rather than trying to develop something new within USDA maybe just, you know, given a charge or out to those extension services or land grants might be best use of the money as we move forward here. So, that's another thought of mine that came to mind at the moment. Thank you.

MR. REDDING: Thanks. Missy and then David.

MS. HUGHES: Thank you, Melissa Hughes. Is this still on? Okay. I might be speaking a little bit outside of my realm here but I think that, Michael, you mentioned encouraging cooperation and I think as we go forward and consider this charge we need to think about who all the participants might be at the state and local level. And you know, it comes to mind that as we've done some investigation into how crops are, how crops find a presence in them, I'm trying to think of the right politically correct word to use here, we see a lot of transference of seed in combines and
in machinery as it, you know, moves from one farm during another during the harvest season and I think it's really important to think about the different ways that we see the transfer of genetics between crops and it's not just drift, so it's not just going to be that farmer to farmer conversation, you know, when are you planting. It's also going to be a conversation about what are you doing with the combine that was just on your farm. You know, it's my understanding that as a combine leaves a farm and goes to another farm there could be bushels of corn or soy still left in that combine and then that, Leon's shaking his head at me so I must be, whatever it is, it's another place. So where, all along the chain, is the product being handled and adjusting that. And then the other thing is, Alan, if you get the microphone again, I would like you to explain this concept that you're saying of existence, coexistence is really going to struggle over the next couple years. You're putting an outline on it. I'm probably not supposed to ask you a question directly but I'm stuck on that and I want to know what you meant, so.

MR. REDDING: Let's come back to that in just a moment. But, Missy, you remind me of something. In the last sort of couple months in Pennsylvania based on the experiences of those poultry producers in Iowa and Minnesota and other states is the level of individual producer
engagement around biosecurity on the farms. And it's been very interesting, individual poultry producers asking some very, very detailed questions of folks coming onto the farm that it is not unlike that for this topic, right. You're just engaging to say where have you been, what are you doing. So, there's probably some parallels between that biosecurity individual action but I also say either as a State Department of Agriculture or as a trade association this state has had the same type of engagement where producers are hyper-focused on keeping that virus of course out of Pennsylvania and off their farms. But you could substitute, right, the gene flow and other concerns. So I just put that on the table as a conversation.

MR. KEMPER: Mr. Chairman, let me respond to that question here, if you don't mind.

MR. REDDING: Sure.

MR. KEMPER: Okay. First of all, I want to hit your comment just now.

MR. REDDING: Yeah.

MR. KEMPER: One of the first things when Homeland Security a few years ago really came into terrorism and all that in the U.S. they said, where are we most vulnerable, and they said American agriculture. And American agriculture at that time had PD-9 which is presidential directive 9 which looked at bioterrorism in agriculture.
One of the main places you could do that is bring in Asian rust into the soybean belt and basically wipe out the soybean crop in about four days. So even though the livestock producers are real cognizant of watching it so is all pretty much American agriculture including the cropland.

Let me just give you a paragraph or two maybe of helping you on the non-coexistence in the next two years. 30 to 50 percent of all farm income being lost over the last 12 months because of the lower grain prices and the higher cost of inputs have forced a pressure onto American agriculture that we haven't seen probably since the '84 crop land. When I was in the Senate in '84 during the severe financial credit crunch we had a person come into every Senate office almost every day with a yellow rose saying, that's for another American farmer that committed suicide today. No different from today in American agriculture over the next two years. Coexistence is going to be very hard, just the temperament of American agricultural attitudes will be very hard to get to a positive state when they're taking a 50 percent bath on their net farm income and they're seeing that the cash rents, the land values, the cost of inputs consistent or higher or at least at the same level. So my point is, even though our goal which my goal is the same as yours, it's to get them to talk, having good coexistence, it would've been easier three years ago when
the price of commodities and net farm income was at all
record levels than it will be over the next couple of years
when the prices and the incomes are lower. So, I think
we've got two struggles. We've got to get them back to the
first level of coexistence before we can take them to the
level we think they should be at on coexistence. Thank you,
Mr. Chairman.

MS. HUGHES: Thank you.

MR. REDDING: Yeah, thank you. David?

MR. JOHNSON: David Johnson, thank you, Mr.
Chairman. Having most of my experience in the alfalfa
industry one of the topics I wanted to review was to go back
to the --

MR. KEMPER: Chairman, we can't hear down here.
She's having a hard time recording.

MR. JOHNSON: Hello?

MR. KEMPER: Yeah, talk right into it.

MR. JOHNSON: All right. I'll get right into it.

So, coming from the alfalfa industry, one of the things we
talked about back in 2012 were grower opportunity zones and
so we've had 2013, 2012, 2014, 2015, four production seasons
since those were introduced. And to remind you what they
were, they were grower opportunity zones set up for alfalfa
seed production where farmers would go to county to be all
basically GE seed production or all conventional seed
production. And so I think there's a lot of data that we could get back from NAFA, the National Alfalfa Forage Alliance, who assimilates data from all of the seed production companies that produce alfalfa, whether that's, you know, DuPont, DOW, or SNW or, you know, Forage Genetics. And we could learn from those because behind all of those they had best management practices and you know, those are available on the NAFA website. And so I think that's a starting point to hear how that experience has gone. It's local. It's typically within a state, typically within a county. Growers talk, they know each other, they know what they're doing for alfalfa seed production and you know, alfalfa's been one of the interesting crops because it's got a lot of funding behind it at ARS. We heard that there was the feral alfalfa study, there was the gene flow study, there was the bee part of it. And as that data becomes available I think we can see how those BMPs are actually working. And so I think at our next meeting or even before then we can ask NAFA to maybe see if they would be willing to put together a report that summarizes how that experience is going. Thank you.

MR. REDDING: Good, thanks. Keith?

MR. KISLING: Alan, you're exactly -- Keith Kisling. You're exactly right. The reports I'm showing, net farm income for '15 is 38 percent less than it was the
year before, 28 percent two years ago. So we're picking up
28 percent, 38 percent of less net farm income in the last
two years which is really going to hurt. It's going to
affect the young farmers. And I've got a young son that
just come back this couple years ago and it's going to be
tough.

But you're asking us what are we thinking, what's
the first thing that come to mind when you said, how do we
get it to the local people. And ironic enough the very
first thing I thought of was extension and our land grant
colleges also. And we discussed that in a last meeting and
it worked. I'll guarantee you, it worked. I saw a lot of
interest of our young producers especially coming out to
meetings that are local. At the local meetings we have 77
counties in Oklahoma. We've got an outstanding land grant
college at Oklahoma State University and they sent people
out regularly to put on reports and we heard quite a bit
about this, gene flow, pollen flow, talked about it quite a
bit even though it doesn't do much on wheat but we do have
some other crops that it does affect. So, it was ironic
that I thought the very same thing some of those did about
extension and land grant colleges. I think that's an
excellent way to get it out real quick to the farmers.

MR. REDDING: Yeah, I mean, they clearly, they've
got a role, a significant role. I guess I would just sort
of put a note to this that this is not sort of one party's responsibility, right. There's going to be multiple parties involved, farm bureaus, extension, local organizations of any number of types. So, a lot of folks. But certainly extension's part of that. Mary-Howell?

MS. MARTENS: I saw some of the materials that Pennsylvania put out trying to protect against the Bird Flu epidemic reaching Pennsylvania with a fall fly way possibilities. And I thought it was interesting because for one thing it looked like best management practices were being put together without a real clear idea of where the threat was. But, the poultry producers were highly motivated to do something because they're vulnerable, because they stand to lose a great deal of money if indeed the epidemic hits them. The beef producers in the same area who might have some impact on the presence of wild birds are not motivated at all because it doesn't threaten them at all.

I think therein lies a lens for us to look at this and that is in every relationship there is going to be someone who is vulnerable and someone who is not. And that is a relationship between people, that is a relationship between, with organizations. I will stand again encouraging the development, as Laura said, a curriculum, something that is neutral, something that is based in fact and does not
take sides, does not take, does not make value judgments about what is a good position or a bad position, quote unquote. But has best management practices for preventing contamination, gene flow. But Missy is absolutely right. It isn't just gene flow between, of pollen but there are control points throughout the system where there could be vulnerabilities and these need to be identified not just for corn and soybeans but for peppers, for other things that are maybe not yet genetically modified, both crops, but might be coming into the future.

Getting a system put together that is neutral and that is based in fact, based in experience, based in testing that then can be distributed and then taught from I think would be really valuable. Because while I know cooperative extension does have a lot of good people in it I also know that cooperative extension has some pretty ineffective people in it. So, expecting every extension agent to teach to the same level of competence, knowledge and outcome is kind of unlikely unless some good teaching materials are provided to them.

MR. REDDING: Yeah. So a good reminder, you know, that when you look at the recommendations from the report, the original set of recommendations, I mean, there were two sort of components. One was around education and outreach, the other was the potential use of USDA, NRCS programs to
help facilitate that coexistence. This is a conversation that is not solely about conservation discussion, right. And so thanks for the reminder. But it also gets at that sort of basic requirement of having, you know, elevating the conversation and general awareness but also just the education we need to do. So, that curriculum is a good point. So, Josette?

MS. LEWIS: Green light. This is Josette Lewis. In thinking about this challenge of developing a curriculum or definition of best practices it strikes me how complex that is. You have very different crop biologies, very different cultivation and cultural and business practices around different types of farming systems even in the same crop, different contract standards that are out there. And then you have different constituencies for how they define best management practices. And probably different levels of state commitment to different types of agriculture. I mean, I sit in a state that's highly invested in organic agriculture and I'm sure there are other states who are not quite as invested in that.

So as you think about to me the key thing being these incentives and this is the place where I see potentially a role for USDA and the federal agencies to spend some energy thinking about it, getting that yes. A lot of that definition of the best management practices I
think actually does have to occur at a reasonably local level because of all of these differences. You know, it probably doesn't do California a huge amount of benefit to be focusing on best management practice around corn production, for example, even though we do grow some corn it's not a big crop for us. Whereas Illinois, that might be more important to them and so forth. So, seems to me a lot of the solution is going to be on the incentive side and to make those incentives such that they focus on bringing parties together and bringing them together at a local enough level, whether it's grower organizations and cooperative extension. I mean, allowing a lot of flexibility for the solutions to be driven at the local level because I think that's where the specificity and the buy-in will take place.

So, I do think there's a huge opportunity at the federal level to think about that incentivize because, you know, state or local governments may not feel equally compelled. And yet, if we're trying to look for diversity in our system that's a place where the federal government can play a facilitating role. I mean, I think about this like in the context of water management in our own state. The state sets regulation standards but they allow local groups and lots of different types of local groups to come together and decide how they're going to implement those
regulations. And then their plans do get reviewed at the
state level but our state does not tell local irrigation
districts or local municipalities how to manage a lot of the
water resources issues. They allow groups to come together
and I think that's kind of how I see a potential role for
USDA and other federal agencies is to provide a flexible
enough incentive program that encourages and provides
diversity that occurs at that local level because there's so
much difference in what is best management practices. It
seems hard for me to wrap my head around kind of a course
book that we could develop at a large scale at the federal
level or the national level even if it just wasn't federal
involved.

MR. REDDING:  Good point. Doug?

MR. GOEHRING: Thank you, Mr. Chairman. There's
been some good suggestions made around the room and I, I
don't know if there's any one entity that can probably take
charge and go out and deliver this. But I went back to
thinking about something that Ron said when he talked about
the state-developed pollinator plans. One thing that we did
when we put those together and we were one of the states
that did that right off the bat, we had stakeholder
meetings. And we kind of outlined what we believed were
some of the best management practices instead of trying to
start from square one. We brought the facts to the table
then with all the stakeholders, and there were numerous ones there and I'm sure there would be in this situation too, you have a chance to talk about what are the best ways to communicate, what are the best ways to develop more of those best management practices to address things with noxious and invasive weeds and pathogens that are moving based on farming practices and what's happening with wind and water erosion for example. Buffers and we got into biosecurity exactly right.

Those were things that when we sat down and started dealing with some issues in our own state and we, we were lucky we weren't Minnesota. We only lost about 17 percent of our poultry in the state. But we sat down with those involved that were managing those that had the facilities, those that were going there, those that had any role to play at all to pick up more information and to do a better job. So I would think one of the key things that would come out of all of this would be every state working with extension, the land grants, with the state departments of ag, with the other stakeholders in that state. But I think it's got to be somebody up front, maybe it's NRCS bringing some of this forward too. But somebody has got to have the outline. I think we have the format. The format is going to be you've got to have stakeholder meetings, you've got to have the conversations and you have to talk
about what is it that's being considered and let them be part of the solution.

MR. REDDING: That's a good point. I mean, the premise here is that we know what our neighbors are doing. I've got five neighbors who farm and I don't want to pretend that I know all of it. I know some of it. I don't know all of it. Two of them are absentee, right. So I think you have to sort of look at who is there and the dynamic and understanding that it's a complicated conversation. But there still has to be, you have to be inquisitive, right. There's got to be some desire to engage. And how do we do that? I think that's some of the hesitancy in knowing based on I think some of the public comment that came in about, you know, the education component just isn't raised to the level of I guess we thought it should based on our set of recommendations. Which again, that's intriguing to me because it comes back to that point of engagement and being able to talk to producers and ask about what they're doing and plan then around that. How do I plan once I know, right. That's easier than simply, you know, not knowing at all what they're doing. So we've got to look at that issue of engagement as well. How do you do that, how do you do that effectively. Barry?

MR. BUSHUE: Is that on? Yeah. Barry Bushue. I want to comment on what you just said to start with,
Russell. I don’t disagree with you but I must be fair and say we've had significant discussion here today about talking to folks and having them put on record what they raise, where they raise it, how they raise it. While that all sounds very good philosophically and I understand it rolls right into what you're talking about, it creates some significant challenges in terms on an individual's farm, not only for our economic viability, our proprietary methods, the markets that we have and we have established and want to protect and maybe most importantly the more recent acts of vandalism on crops in the last three or four years by folks who think it's okay to go onto somebody's farm in the middle of the night and destroy their crops. Those are the kind of things that I would have a real challenge in supporting any type of mandatory means of determining and telling the public what it is I raise and where I raise it.

In terms of extension, a lot's been talked about extension. It sounds good philosophically again. We have some great extension agents and it is a method and a local method which works very well. But I would caution that there is as much diversity of opinion, as much passion, as much advocacy for various forms of agriculture within the extension service as there is within this room. And so if we're talking about, you know, presenting a neutral picture I'm not convinced in all areas that you get the neutrality
from extension that some of us seem to think that we will get.

And lastly, in terms of the curriculum, I tend to agree with where Josette was and I think Mary-Howell brought up a good point philosophically. But in a state like Oregon that has 250 various commodities and geographics and microclimates that range from coastal rain forest to high deserts with less than nine inches of rainfall a year, we've, you know, we've found over, and over, and over again that what works even on one segment of my farm won't work on another segment of my farm and I farm a very small farm. So, I think it creates challenges but I don't think we ought to give up on the discussion. Just pointing out some of the, I don't mean to point out all the negatives but I've just been sitting here listening thinking about responses to some of the things that have been brought up.

I was a little, I guess I was a little disappointed in the lack of ability or the lack of desire to follow up on the educational pieces that we had proposed as recommendations. That frankly worries me a little bit. It seems that we're entering an era of folks moving against science, facts, and data. And I mean, that's really what USDA is based on and frankly that's what my farm is based on. If I don't have the data and the facts and the science I'm not very successful. So I guess it's just a
disappointment that there was a rejection of education. And I think that ought to frighten us all.

MR. REDDING: Okay. Michael?

MR. FUNK: Thank you, Michael Funk. I just want to remind the committee as we're talking about, you know, BMPs and pollen drift and you know, talking to our neighbors about what they're planting, in my mind the biggest cause for, you know, genetic pollution is the seed. And you know, we heard this morning from the committee there some of the good efforts that have been happening on the germplasm and trying to get pure seed. But I'm not sure we have good, solid data on this but my sources seem to believe that a majority of the, you know, AP presence that's found in a lot of the non-GE and organic products are from the seed stock. And so continuing to focus on that, and if we knew that that's 70 or 80 percent of the problem I think then it's worth putting 70 or 80 percent of the resources on that as opposed to, you know, thinking that it's pollen drift is the biggest part of the problem. So, I encourage USDA to continue those efforts on the seed and potentially to try and get your arms around the percentage of where the problem is on the AP presence in the various commodities. Thank you.

MR. REDDING: Thank you. Alan?

MR. KEMPER: I would just like to follow up on
Michael's point. I think there's a real concern with all the producers that we have pure seed. I mean, whether it's white corn into the yellow corn seed or yellow corn into a white food corn there is a concern there whether that is organic or conventional or GE. Mr. Chairman, I think there really is three things that we really consistently can possibly agree one. One is that we need a universal, consistent message through the country. We can't have various messages for various entities and stakeholders. Two is that we need a neutral site and a neutral delivery system, somebody that's not necessarily competing with those various stakeholders, i.e. extension works really well in that example. Third, that all stakeholders must be involved. And I mean, not just, it's so easy to talk about the neighbors across the fence or the no more -- we don't have fences, but across the border so to speak. But we also need to have the seed producers, the various industries in there. I'm even thinking of some of the feed manufacturers for livestock. Because a lot of our problems in somewhat of the Midwest have been brought up with seed ingredients, I mean, feed ingredients coming out from other parts of the country, whether that is genetics or whether that is weed seed that's coming across or whatever. So, we need to have all the stakeholders. So those three things I think are somewhat a must in my mind. Thank you.
MR. REDDING: Okay, thank you. Angela then Jerry.

MS. OLSEN: Great, thank you. I just wanted to respond to two points and then perhaps a provocation back to the education piece. But let me start first with seed producers. I think most people know obviously our business is to make seed. And so we sell bags of seed according to the specs that we say are on the bag. If we represent that's what in there then that's what's in there. And again, it's a contract between us and the folks that are purchasing the seed. So we have certain purity standards and we adhere to those specs.

The second point, some of you heard this in Raleigh but not everybody was there so I just want to make sure everybody is there. Really thanks to these great discussions at the table we now, I can speak for ourselves as a company, there are other seed producers that do this as well but again I'm only going to represent what our company is doing. But I think that others in the seed industry have really followed suit here. And that is that we now give materials as part of our agreements on coexistence and that's very public. You can go onto Pioneer.com for example and see those, we have a, and I have a copy here if anybody would like to see it, a section on coexistence and that's part of the contract. So when a grower buys our seed that's part of the contract. There may be some growers in this
room who may be familiar with that as well. And that contract is also available on our website on Pioneer.com. So, I do want to thank everybody for the great discussion the first time, you know, and the question about what could the seed producers do. We took that very seriously and as a company, and again, I know many others in the seed industry are doing this as well. We have section on coexistence and talking to your neighbors and that sort of thing. And it's part of the contract that growers sign when they buy seeds. So, just wanted to make sure everybody was aware of that.

The third point really is the provocation. And it's not a negative provocation, it's education. I also am perplexed, and I don't know if it was a rejection of the concept or perhaps as an AC21 we were so positive and it was really front and center in our report that perhaps people didn't feel they needed to comment on it because it seems to be such an obvious point this education. So I don't know if it was rejection or if it was just there was an overwhelming support because maybe people agreed with it. But I do want to raise it again because I think particularly now that we know what this charge is, education is going to be a huge part of this, making sure than any solutions are based on fact as we heard today, based on sound policy, making sure that the educational piece is a part of this as well on all sides now that we're looking at coexistence in a broad
sense. This isn't just between one type of cropping method and another but looking at all sides, all different cropping methods. Education I think is going to be key. So I don't, I would hope as an AC21 committee or as an AC21 that we don't, we don't reject education because I do feel that it is an important part of these discussions and a positive part of these discussions.

MR. REDDING: Yeah. I think we were intentional in our recommendations in leading with education and outreach and I think what I was trying to express was when we looked at the public comments and feedback on the recommendations that AC21 had made specifically around the Federal Registry notice as well as the workshop is that the feedback wasn't, there didn't seem to be a groundswell of support for the toolkit and the outreach and education as there was around seed purity and some of the other recommendations and work of the USDA. Having spent some time with Secretary Vilsack and I think he will also lead with education and outreach. It's still important. But I think just, I was trying to sort of put on the table and to Barry's point I think still it's there. I mean, that really is a cornerstone of our recommendations and I think the work that we need to do going forward. There's got to be parallel tracks but one constant is around this education and raising the awareness. Otherwise I just don't know how
you ever sort of have an intelligent conversation about sort
of the challenge in the marketplace and any corrective
actions you could take or should be taking, right, to
address those issues. So let's take one more comment from
the committee and then we'll break and then we'll pick up
with the conversation after that, please, after the public
comment. Jerry?

MR. SLOCUM: Jerry Slocum, thank you, Mr.
Chairman. It seems to me listening to the discussion about,
primarily about education and it's the easiest part to talk
about, folks. It's the easiest part for us to agree on and
it's the easiest part for us to implement because we've
already identified the providers. But education's two
components. There's teaching, what we're talking about, and
then there's learning. And I'm not certain that the million
or so farmers that are out there in this country that are
involved in all different aspects of agriculture are
terribly interested in learning about this subject. And so
they've got to be incentivized. It's easy for a seed
producer to have an incentive to want to teach and to want
to have a coexistence plan because he's being paid. He gets
the incentive, he gets a premium, same with an organic
farmer, same with those conventional farmers like me that
try to sell a non-GE product. But what about the guy that's
just out there trying to raise a conventional crop and sell
it to the general marketplace for a cost effectiveness or
the guy raising GE crops. What's his incentive?

And I think that's the real challenge of the
education component. Because he's going to be challenged as
Alan has expressed to you. He's going to be challenged just
to make a living for the next couple of years, just to make
a basic living. And he's going to be competing with a
neighbor for land and for resources and for a whole host of
things. So, that guy that doesn't have a financial
incentive is going to be hard to talk to for a little while
and maybe for a long while. So, I think as we talk about
this educational component, and it is certainly a, I'm not
sure it's the key but it's close to being the key, we've got
to figure out a way to incentivize that guy that's not
getting a financial incentive to do a coexistence plan.

Thank you, Mr. Chairman.

MR. REDDING: Yeah, excellent point. So, we will
pause here. We're going to take a break. Michael, 10
minutes or --

MR. SCHECHTMAN: Yeah.

MR. REDDING: Yeah, let's take a 10 minute break
and then we'll pick up with public comment and then once
public comments are finished we'll resume the conversation
here. All right, thanks.

(Off the record.)
(On the record.)

MR. REDDING: Let's reconvene, public comments.

We have two individuals who had signed up for public comments. At this point we only see one of those individuals so we'll see whether the second shows by the time we're done here. Public comment now, as all of you know, we have reserved time for public comment as provided under the Federal Advisory Committee Act. Each person who has signed up will be given no more than five minutes to speak at the microphone here at the table. We would ask those making public comment to please provide Dr. Schechtman with an electronic copy of your remarks. We intend to post the text of your remarks on the committee website. I'd also like to note to the committee members that this is a time to receive comments from the public and this is an important and mandatory function of the committee. It is not, however, intended to be a dialogue with commenters. There was some discussion of this possibility at the previous plenary session but USDA has decided that this is, the dialogue between the range of members appointed by the Secretary that is most essential to this effort and time for the dialogue among members is most critical. So there will not be a back and forth of the members of the public at these meetings. Our first public comment is from Dr. Margaret Mellon. Dr. Mellon? If you could use the
microphone here at the table, please?

MS. MELLON: Is there a microphone?

MR. REDDING: Yeah, right here.

MS. MELLON: I just, I will just take this brief opportunity to say how nice it is -- I'll just take this opportunity to say how nice it is to say all of the people -- I'll pick up the whole thing -- all the people here because I sat on the earlier incarnations of this committee and you know, I'm happy to see it continuing to do its very hard work and there are none of these issues that are easy. I think the only comment I would make today is to the individual sitting almost at the end of the table who made the comment that it is, you know, before you set out in the direction that you now appear to be going which is looking from the federal level and trying to encourage something happening at the local and regional level you want to make sure that that will address a major part of the problem. Will that really reduce the amount of contaminated seed that is out there available for sale?

And I can see how important it is to work at that level but it also, just listening to your discussion, seems a very, I mean, there are just lots of opportunities for conversations that may go nowhere for any number of reasons. So I just want to acknowledge the boldness of the idea but from a scientific point of view, if in fact the real problem
is contaminated seed then you do have to ask yourself whether this particular approach is the best place to put a large commitment of federal resources. And I think scientifically that is a question worth, you know, trying to answer. More resources put on seed contamination might be better put.

And then my other question is simply, I'm not getting a good idea of whether the AC21 is envisioning or has access to a pot of money that could be used to help provide incentives to folks at the local level who may need some encouragement to kind of come together with their neighbors. But I think that's a big part of this pie. If you're talking about incentives where will those, those incentives come from. But that, thank you very much for the opportunity to make comments.

MR. REDDING: Great. Thank you. Thank you for being here. The second is from NASDA, is Dudley Hoskins here? I didn't see him earlier so, okay. All right. So they were the two that were preregistered or at least noted their interest in public comment. So, hearing none others, right? Let's resume with the conversation we were having just before break which were great conversations by the way and thank you. It was the intention this afternoon just again, to sort of think broadly about the task and what we could do to address, encourage, incentivize the joint
coexistence plans. Alan, you had a thought?

MR. KEMPER: Well, my thought was Mary had her little thing up a while ago, so, did you have anything before I had my thought?

MS. MARTENS: Gary kind of said what I was about to say before break and that is there's a difference between teaching and learning. And we can probably do something on the teaching level. The learning and the changing behavior level is going to be a little bit more difficult. And therein, I had a question for Angela. You said that your company has a coexistence plan and it's there, you know, in your contracts. But is there a requirement as part of the contract that your seeds, your grain growers must bear 50 percent of the responsibility for any potential buffers or other changed planting plans so that they don't impact, negatively impact their neighbors or is it just information that is disseminated?

MS. OLSEN: Mr. Chairman, can I respond to that? You're welcome to, I'm happy to show you a copy of the contract and you're welcome to --

MS. MARTENS: I will look at it online.

MS. OLSEN: -- to look at it but, no, we're not getting into that level of specificity. It's really going back to what we had as the top point out of our AC21 report which is education. So, it's education, it's telling
growers that it's important to talk to your neighbors which is something that I know we've spent a lot of time talking about at the AC21 meetings and then the contract. And again, all this, you know, the seed companies, other seed companies have contracts as well but that was an outcome of our last meeting that we said, you know, folks really need to talk over the fence. And we think that's important and we understand that already does occur in the countryside but we wanted to, as seed producers, do something and put that in as part of our contract as well that growers sign. So, no, there's nothing about 50 percent buffers, et cetera. Every crop is different, every grower's trying to meet a different specification for a different contract which is some of what we were talking, you know, we as a group were talking about before. So, it's different for every grower trying to meet different specs. But there are stewardship plans depending on what traits they grow that have to be followed. But you're, it's a very public document and I encourage you to take a look at it.

    MR. REDDING: Thank you. Lynn? I'm sorry, Leon, Leon.

    MR. CORZINE: Mary, I may be able to help you with that. Leon Corzine. Our contracts, we bear 100 percent of the buffers whether then we meet it or not. But it's incumbent upon us in the contract --
MS. MARTENS: When you say your contracts what do you mean? You and, between you and who?

MR. CORZINE: Well, between me and Pioneer DuPont or whatever company I may be growing for or if it happens to be Frito-Lay and it's a food-grade corn. Okay, so our, somebody with white corn, whether it's ADM or Cargill or Tate & Lyle, whoever it may be, that's all part of the contract and that's why I get a premium then for what I grow.

MS. MARTENS: I guess that's not my question. In that case, you are the one who would be negatively impacted. What about your neighbors if they were negatively impacted by what you were doing? Are you bearing 50 percent of the responsibility to prevent that negative impact on their farm?

MR. CORZINE: No, but we do have a conversation as to what I'm growing and what he's growing.

MR. REDDING: Okay. Alan?

MR. KEMPER: Thank you, Mr. Chairman. Sometimes it seems like we go in circles of three or four years with this group and I can remember that discussion in 2011. I would like to go forward with this group and talk more about the vision of what your charge was. And as we deliver the various messages to the various stakeholders and as we've mentioned, Mr. Chairman, over the break, there are various
methods to do that whether that is through extension or others. But I can think of several other ways to do that. You have the farm managers and rural appraisers who have continuing education, you have the private applicators' licenses like we were talking over break that would have continuing education. You have certified crop consultants that have continuing education. You have commercial pesticide applicators that have commercial, I mean, that have continuing education no different than I do as a realtor. So, as I address that through various methods of their time blocks and usually a two-hour time block it would be very easy to talk a little bit about the coexistence and the future of that in American agriculture. Thank you, Mr. Chairman.

MR. REDDING: That's a good point. So maybe being able to work this in back to that curriculum point, you have some venues that are already standing requirements for agriculture to carry certain credentials.

MR. KEMPER: My scope is limited. There are probably --

MR. REDDING: Yeah.

MR. KEMPER: -- so many more.

MR. REDDING: Right. Great, that's a good point, great. Laura?

MS. BATCHA: Laura Batcha. I thought I would just
go back around and address this question about the surprise around the lack of enthusiasm on the education and outreach components of the final recommendation. If my memory services I think my organization was probably one of those more sort of tepid comments around that recommendation. So I thought I'd address that and I think remind us that, you know, as we're surprised by that I think these were discussions that we had all along in our AC21 deliberation so I think, you know, the memory of it having been not discussed then. So I'm just going to remind us.

I think the reason we provided those comments and the reason why our priority in terms of enthusiasm hasn't been in that area are for a couple of reasons. One, priorities and I think Michael touched on that. If we believe there are a few key things you have to go after like seed purity, you know, our view has been and I've shared that with the committee, you know, we have to sort of go after those things first and try to put our effort there number one. And number two, enthusiasm around the idea of education and outreach outside of the context of what you're educating about is hard to get behind. So I just wanted to sort of clarify that in terms of the historical conversation and I think we were probably one of the organizations that did weigh in that way in the comments.

MR. REDDING: Good, thank you. Keith?
MR. KISLING: Mr. Chairman, I don't know if this will help any but I'm going to throw it out. We talked a little about it at break. But this is farmer perspective because that's what I am but I know wheat, I don't know some of the other crops very well, we don't raise those. But for us wheat farmers we have to go in and certify our acres of what we planted, when we planted and what we were going to do with it already. We planted it in September, October, we don't harvest until June. So, we've already told FSA that we're going to plant wheat and we're going to harvest it in June. If we wanted to get out what we're doing they've already got a record of what we're doing. There's not been any gene flow yet. Our neighbors would all know what we have and when it's going to happen. And I don't know if that information -- I asked Mr. Goehring about that, he thought it might not be legal to get it out and that's probably right. But they've already got the information on what we're planning out there. So I don't know if that's helpful or not but it lets you know that we're kind of doing our part to get it out already and they've got a record of it. Thank you, Mr. Chairman.

MR. REDDING: Keith, why do you report that? I mean, I guess for everyone's benefit here, is that a requirement under the FSA programs for you as a producer to be part --
MR. KISLING: Yes, Mr. Chairman. If you want to be part of the farm program, and there's a lot of benefits to being part of the farm program, then you have to go in and certify your acres early and tell them when you planted it, what you planted and how you're going to handle it.

MR. REDDING: Uh-huh.

MR. KISLING: That way you're in the system if there's a benefits coming your way because of a short crop then you're a beneficiary to that. So, about everybody goes in and reports their acres early.

MR. REDDING: Uh-huh.

MR. KISLING: There's a deadline on that. It's after you've planted your wheat.

MR. REDDING: Right.

MR. KISLING: And I don't know if the other crops are that way but I know that's the way wheat is.

MR. REDDING: So, it'd be another point of contact, right. So we're thinking about --

MR. KISLING: Yeah.

MR. REDDING: -- outreach or, you know --

MR. KISLING: I don't know if that helps but if it does, look at it, if it doesn't, that's fine.

MR. REDDING: Yeah. That's good. Lynn?

MR. CLARKSON: Lynn Clarkson. I'd like to follow up on that point. There's a massive acceptance of cover
crops that is important across the Midwest right now. And exactly what you said about filing and I think it might be important to have a filing of intent. Because what I see going in our area is people flying on cover crop in fields that are un-yet harvested and then the neighbor plants his wheat field. And I haven't seen too many flown on seed plantings that were perfectly in a straight line on the edge of the field which means I just gave you cereal rye in your wheat which may result in your rejection if you're raising seed or something else. But the information that you provided, if it could be provided ahead of time, a statement of your intent would let the neighbor who wanted to be helpful not fly on cereal rye right next to you. And we're going to see a lot more of that with cover crops.

MR. REDDING: I believe Dudley Hoskins is here from -- Dudley, welcome. If you don't mind, please join us here. We'll just pause for a moment for another public comment. I won't share all the public comment background and just the notice but to remind everyone that this is from the committee's benefit and it's not sort of a Q&A with the public commenters but an opportunity for them to impart up to five minutes their perspective on this issue. So, Dudley, welcome.

MR. HOSKINS: Thank you, Mr. Chairman. Is this on? Yeah. And my boss told me, not five minutes, she told
me 30 seconds. I said, I'll try to do her best. But my boss, NASDA CEO Dr. Glenn sends her regrets, and by regrets I mean her staff. My name is Dudley Hoskins, I'm fellow policy counsel for NASDA. NASDA is the National Association of State Departments of Agriculture. And before we get into the comments I just wanted, on behalf of Dr. Glenn and NASDA, I wanted to thank Secretary Redding and Commissioner Goehring for your alls' leadership and investment into this committee over the years and everything you all do individually and collectively both for the AC21 and for NASDA in general.

So, I guess our, the NASDA comments I say are somewhat timely. I understand the AC21 has an updated charter and it's asking you all to explore ways where farmers can be encouraged to work with their neighbors on coexistence initiatives. And the answer to that question is yes, there absolutely is a way. And Commissioner Goehring knows this better than anybody. But from the NASDA perspective we would like to point you all to what is called a State Managed Pollinator Protection Plan, commonly referred to as an MP3. And Dr. Schechtman, I don't know if it's appropriate now, but I brought some comments, some extra copies of the NASDA comments to the committee and I left them on the desk up there.

But in short, you know, an MP3, a State Managed
Pollinator Protection Plan is a model that NASDA would recommend the committee consider. That is, it is not driven to a specific mandate or regulatory trigger. It's a vehicle that allows stakeholders to work together to help produce our country's food, fiber and fuel in a collaborative and productive manner. And I don't know how many people here are familiar with honey bee health issues and I'm more familiar with those than I am the coexistence challenges. But I would say on both sides of the ledger there's a lot of complicating factors. The policy issues are one side of it, the people issues are really the real challenges. And we look at some of the MP3s that have been developed and implemented in five states to date, I would say Florida, Mississippi, Colorado, California, and last but not least North Dakota.

And what we've seen through the development of the MP3s is we had a commissioner, secretary, director from the state department of ag call on their stakeholders to come together to identify best practices, lessons learned, vehicles for communication and to explore ways to enhance that in a collaborative and non-regulatory approach. And the model has been so successful that just this past May the White House, through their national strategy to promote honey bees and other pollinators referenced the State Managed Pollinator Protection Plans and called out North
Dakota as one of the states specifically where this model worked so well that EPA and the White House and USDA's working to expand that approach across all 50 states and four territories.

So, I know that's more than 30 seconds and I know we don't have time to get into all the specifics of it but from a NASDA side we would very much encourage this committee to look to that model and to look to the NASDA leaders involved in that process as a resource and as a vehicle to forward informed and workable solutions to what is hopefully not an issue into perpetuity. But with that, I will yield back, Mr. Chairman. I don't know if you wanted to do Q&A or just --

MR. REDDING: No.

MR. HOSKINS: Okay.

MR. SCHECHTMAN: You sent your electronic copies?

MR. HOSKINS: Yeah, and I can hand out some hard copies.

MR. SCHECHTMAN: No, that's --

MR. HOSKINS: Okay.

MR. SCHECHTMAN: -- we're good.

MR. HOSKINS: All right.

MR. REDDING: Dudley, thank you, and please extend our regards to Dr. Glenn. We look forward to reviewing the MP3 comments that has been referenced twice here today as a
possible model. So thank you. Okay, further comment? Yes, Alan?

MR. KEMPER: Just a further comment, if you would, on lands. This is why, in my opinion, coexistence is so important is the additional avenue of the cover cropping and aerial flying of that on. I mean, it's so important to tell the story on whose ground you're actually supposed to be putting that on with the additional rye or wheat that could be flown on and drifted through. I mean, it'd be worse than a pollen drift to me in some areas. The other thing is, with 7,000 drones, whether fixed wing or rotor being sold within the last 12 months there's going to be a new monitoring on that coexistence ground by everybody. And so it'd be, time is, to me, of the essence to get our story out on coexistence before, you know, before it could all break loose.

MR. REDDING: Very good. Thank you. Lynn, just back to, Lynn Clarkson, just back to your comment, Lynn. So, just coming back to your statement --

MR. CLARKSON: Sorry about that.

MR. REDDING: No, no, that's okay. So, you made a statement about the statement of intent, right. That is, that's not a formal piece, that's just sort of an observation?

MR. CLARKSON: Yes.
MR. REDDING: Okay.

MR. CLARKSON: It's just an observation. I know of no reporting that requires us to put down our intent for insurance purposes or with the Farm Service Administration. But after the fact there's lots of things that we're required to put down. We're not required to put down what particular hybrid or what particular threat might be involved, either pluses or minuses, but the information in general is there and it's recorded as you said. So, if there were a mapping function to help some of us the information is already there, you just need to speed it up. And in my case or in the case of people that are using cover crops frequently planted by air it'd be really nice for us to know what our neighbors were doing in anticipation because we can't see it when we're flying on seed. And it has come as a surprise to quite a few farmers to find out that they seeded the nearby areas of their neighbors' new wheat field.

MR. KEMPER: Yeah, or the seeded the wrong field.

MR. CLARKSON: I don't mention that one.

MR. REDDING: All right. Leon?

MR. CORZINE: Thank you. Actually you do file intent or record intent with the crop insurance agency. We actually, before we sign contracts on crop insurance we have to do that prior to planting, actually by March 15th, and we
normally plant in April or May. Because you have a
prevented plant thing going in. So you do have that venue
where it is recorded. The seeding deal, I know of issues
once where somebody actually did soybeans by the air a
really wet spring and a neighbor had done seed production
and they over flew and there was compensation paid by the
individual's insurance company in that. So, Lynn Clarkson
is right. There's a lot going on, probably clear across the
country, but in my part of the world too in cover crops,
quite a lot by air but also a lot done prior. And the by
air would be the issue that's somewhat problematic but I'm
not sure what we do about that. Thank you.

MR. REDDING: Yeah, that seems to be a new
wrinkle, right, it's just how to manage that from, you know,
it respects boundaries but at the same time there's plenty
of opportunity there for seed to end up where you don't want
it. Yeah, Josette?

MS. LEWIS: I just want to come back to a couple
of earlier comments that we have to be incentivizing people
who actually have a stake in this and that that's key to
thinking about how to construct those incentives. Because
if I was an organic corn grower in Illinois I might be a
little nervous if there was a lot of public disclosure about
what I was planting versus my neighbors because I might not
get a contract from Lynn if I'm surrounded by a bunch of
genetically engineered corn fields because he would see me as a high risk. So, I'd kind of be cutting my nose off to spite my face. And so, you know, we might disclose stuff to the crop insurance people but that doesn't mean we're disclosing it to the public. And so it seems to me again we have to really always look at these models, because I think it is to look at models for how to incentivize people for whom this is a priority and there will -- to incentivize them to be motivated to come to the table. Because it's not going to be a priority for everyone. And I mean, every farmer but also every part of the country, you know, it's going to vary enormously. So I think we have to be thinking about this as creating incentives to get people for whom this is an important issue at the local level, it's not a blanket solution to coexistence at the national level per se at this stage because not everyone's probably going to see that as a high priority. And as one of our public commenters mentioned, maybe it shouldn't be because maybe there are other things that are also higher priority for the federal government to spend money or even state governments to spend money on. So, I think it's always important as we think about these models to come back to, it has to be an incentive that brings the right people to the table who are motivated to at least come to that table. Because it's not an incentive otherwise.
MR. MCKALIP: Yeah. There's been a lot of discussion about the planting intentions data that's collected every year and I'm getting less and less comfortable the more this kind of ping ponged around the table. I don't think that USDA is authorized to release any of that data by producer. I think we can aggregate it, we can produce data by county or even by state of what's likely to get planted. But I don't think we're even permitted by state of releasing individuals' info there. So I'll do some research overnight, I'll make sure I have a better answer to that tomorrow morning. I just didn't want us to get too far down that path on planting intentions info if that's something that we clearly can't even go there right now. Maybe there's a way, and this gets back to the local and state thing, maybe there's a role there but I think Congress has spoken to a lot of this data and made sure that we don't, as the federal government, release individuals' info, for good reason.

MS. LEWIS: Right. And I think even as we think about, you know, solutions that might work at the local level, it might not be public disclosure of some of this stuff because that's still going to affect market opportunity for a variety of players, so.

MR. REDDING: Alan, did you --

MR. KEMPER: No, I hope the USDA never releases
individual field documents like that because basically
you're violating my contract with you as confidentiality and
you're making my competitors now much more advantageous of
taking my ground away. So I would definitely see you're
charged not to release it but to aggregate it and you can
release it that way. Lynn and I both agree, if you want to
voluntarily do that and somebody else is going to keep that
database that's great.

MR. MCKALIP: Yeah, I think we're saying the same
thing. I just wanted to be clear because the more it was
kind of going around the table it started, I thought, to
appear like perhaps there was a database at FSA or risk
management that you can get into and map it or something. I
just wanted to try and put a stake on that and be clear.

MR. REDDING: Good. Angela?

MS. OLSEN: I wanted to second Josette's point
about incentivizing as well. But also two key points that I
think, you know, that Barry brought up which is we do want
to make sure for our growers that we help them to maintain
their competitive position. There is a position, there's
the point that Josette brought up about, well maybe someone
won't want to enter into a contract. But there's also a
competitive position that the growers, they decide to grow
certain things on their soil, there are, on their land there
are science that goes into it, there is really important
business decisions that go into it. So, I want to make sure and honor that as well so we don't put them at a competitive disadvantage. And the vandalism point is very really as well. And so again, it's all a balance. But I want to make sure that as we're thinking about what some of those recommendations are that we, that we balance that as well. Maybe it's, again, maybe it's a third party where information is submitted but I think those are very real points that we need to keep in mind with any solution or any recommendations that we come up with.

MR. REDDING: Commissioner?

MR. GOEHRING: Thank you, Mr. Chairman. There's been some good points made around the table and I think part of it comes back to some things that Josette has said and Jerry has said and about the incentive aspect about it. It's one thing as a seed producer, an organic producer, an identity preserved producer where you're getting a premium in the market so you have something at stake. But I think Jerry said it really well when he said, what's in it for the conventional producer, the guy that's hanging on by his teeth and he's just trying to farm. Unless there's a threat of something else in all of this there's no reason for them to really pay attention, to learn, to adopt unless he has a real concern with his neighbor which means you have to have a relationship. And then you're concerned about what's
happening to them and then you try to do something.

We had talked about and Dudley had made mention of it and we talked about it earlier with the State Pollinator Plans. The reason those were so effective with all of the stakeholders is because, and I am not at all suggesting we even go down this road, but the reason that was effective is because there was a fear that EPA may ban use of certain pesticides for agriculture use. That was very effective. And Ron was on the other side of the table at that time working for the Department of Agriculture in Colorado and we remember those conversations. It was easy to get stakeholders there and to have the conversation as much as they disliked what was going on they really were ready to step up and do some things or at least have the conversation and then expose all of the variables that exist when you start talking about, at that time, pollinators. And then there was a realization that came to the forefront about where the public and some of the beekeepers' perceptions were when they saw that, oh yeah, we're guests on the land. And if we fight back we get into this disagreement about how we're going to operate and function and coexist together, there's going to be fallout. And all of a sudden there was this ah-ha moment and things really started to work and click and we came up with a lot of good ideas. Now, in this situation, what do we do. What is the, what is the
commonality we're looking for. Because much of it is about mitigation, correct? We're just trying to mitigate risk because there's inherent risk in agriculture.

I have so many farmers right now that, and I deal with this from a regulatory side but it has to do with pathogens for example, whether it's plant pathogens, whether it's seed or soil-borne pathogens, maybe it's animal, there's issues out there and it puts you right in the middle of where these things are at. But it gives you the ability to step in and manage it. So I get calls about this. If someone is over-tilling their field all of a sudden the wind blows or the rain, or you get heavy rain I should say, excessive rain and you start to move soil particles, you start to move pathogens onto somebody else's field and then they've got to deal with that or they don't take care of noxious or invasive weeds and all of a sudden the wind blows after they've pollinated and we have seed flying all over the area and because that's regulated it puts you right smack dab in the middle of trying to mitigate or work with those producers to make sure that we don't have issues next year or at least minimize that.

I think there are ways to approach this. But again, I think Jerry brought up the best point of all, how do we get a certain element, one part of agriculture that really is getting nothing out of this. So you'd have to
build an incentive into this. And what that is, yeah, I probably have a lot of thoughts but I don't think the federal government has that much money either. Thank you.

MR. REDDING: Angela, do you have another point or -- okay, yeah. I mean, I think the, what is the incentive. I mean, I don't know, I mean, to me it's in part just being a good producer and understanding that I've got a, I want to protect my interest but I need to respect my neighbor's interest. And how do you do that, right. I mean, that's really what we're talking about in production agriculture. The assumption is we do it now, the reality is that there are things happening that are not intentional but they're happening. And it's only going to get more complicated going forward with planting, you know, options and varietal options and diversification, however you want to describe it. So it's going to get more complicated.

So I look at the work that we're doing here really a forecast to say what we know today is a complicated landscape to be, you know, by some factor more so in two years, three years, 10 years. So how do we sort of forecast these conversations and actions of individual producers so that you can protect those marketplaces and to me that's sort of the incentive is I want to stay in this marketplace. And if there's an incentive to stay in that marketplace by the crop that I'm producing, great. But irrespective of
that, I want that market protected. And I feel like, you know, this discussion long-term is that we're going to be pushed out of markets, local or otherwise, because of that sort of infraction that I'm not protecting my crop or respecting my neighbor's plan.

And I know that sounds, you know, difficult to manage and it is but I think that's sort of what we're asked today to sort of look at. You can get the seed purity question, you can deal with things that we've heard. But at the end of the day it's a personal question that we take, I take, you as producer. How do you manage that? I mean, how do you want to manage that? And if there's incentive in there for marketplace incentive ideally, but I think there's probably just, you know, a community incentive, you know, to keep peace in this valley. How do you protect that, right? I don't have an answer to that but I think that's sort of where we are in trying to construct, you know, a plan, a model play that would guide us there, right, knowing it'll be, it will evolve over time just as the work of the AC21 of the last 15 years has evolved and think about, you know, the level of sophistication in this conversation versus what it was for those who were there. You know, it's come a long way, right, and we've made a lot of adjustments and there's been systems built. But we have still have this one question around the individual action that producers take
that is the most central question to protecting that marketplace and for the furtherance of coexistence, the personal action. And I guess that's what we're talking about here. The personal action, if that's incentivized what's the incentive, what is it. Missy? Sorry, Michael.

MR. SCHECHTMAN: That's all right.

MR. REDDING: Yeah, Missy, then Michael.

MS. HUGHES: Melissa Hughes. Russell, I want to jump behind what you're saying but I want to take it to a different level. You're talking about personal action and I really appreciate what you said about the complexity as we move forward in the coming years. And I think that as a group, as a committee we need to look at our own personal actions, each of us, either directly or with one or two degrees of separation represents huge producer groups. And we can choose to stay in our entrenched positions or we can choose to say, okay, you know, we have a unique position that's been offered to us sitting on this committee of recognizing what's going to happen 10 years from now and the complexity that's coming towards us. And we can think, how can we actually help these producers to see that the future is much more complicated, to see that small changes now in both practice and attitude will help make the future much less complicated and much more successful perhaps for their next generation that's coming onto the farm.
But I think, you know, if this group wants to sit and think about how it's going to be really hard and there aren't incentives and we're already doing a bunch of stuff so why bother doing more we're just not going to get nearly the success that we could potentially have if as leaders in our individual sectors we were to choose to follow maybe a different course on how to talk to our producers and our constituents about this whole conversation.

MR. REDDING: A very good point. Michael?

MR. SCHECHTMAN: Yeah, a couple of things I wanted to note. One, a couple of times it was alluded to the idea that USDA might still be able to offer some incentives, that there might be a pot of money somewhere or these sorts of things. You know, we, you know, have looked back over our authority to offer incentives and I think the reason we're coming back to you is because that's something that we're really limited in what we can do and there are not a whole lot of pots of money around as well. So, we're really interested in your creativity as to either how we can help a process that is more likely to be based at a state or local level and also whether there are actual incentives that could be offered at the state or local level that commissions of agriculture or others might be able to bring to bear at the local level that would help bring people into this conversation to make those kinds of small changes that
might make a big difference. That's one point.

The other is just sort of a following on, a random thought to throw out for folks. And that is that this idea which Doug spoke to a minute ago about the limitations we have on releasing information about intentions and Alan spoke to the real concerns that farmers would have about releasing that information as well. But that is not to say that there's not some sort of technological tool that you and your neighbor might be able to use to address some of this and maybe there are recommendations around technology that we don't have that might be useful to help neighbors do things. Just something else to throw out there for you all to think about.

MR. REDDING: Yeah. Commissioner?

MR. GOEHRING: Yes, Mr. Chairman. Michael, you brought something up that I forgot to mention earlier. But I believe it's Purdue, did develop DriftWatch which is a mapping system. We also developed our own interactive mapping system which you voluntarily have to go on there and you can put in GPS coordinates, you can go by your legals, and you can identify whether you have beehives there, whether you are an organic producer or if you have a vineyard there. And that's done because we then require pesticide applicators or anybody in that area that would be applying pesticides to then check that map and make sure
that you're aware of what's in that vicinity before you
spray. And they should be checking anyways but given how
busy people are we know sometimes that doesn't happen. But
if they don't check it and they do cause harm not only are
we not going to be lenient with them, I mean, there's
certain conditions where things happen, they did everything
by the label, but if they weren't even checking it they're
even in more trouble. And it can mean stiffer penalties and
fines.

MR. REDDING: So that is a, like a
hypersensitivity list? Is this for the, somebody sensitive,
hypersensitive to pesticides or just producer to producer?

MR. GOEHRING: It's for those land owners that
may, and farmers, that have certain types of activities on
their land. So, maybe they're a beekeeper, maybe they allow
a beekeeper to drop hives there. Maybe they have some
organic production. Maybe they have something specifically
that they want to identify so that everybody's aware in that
area that if they're there they need to be cognizant of that
and take extra precautions. But that does exist but not a
lot of states have it or use it. I know some are using
DriftWatch to do some of that too, but I'm not sure --

MR. KEMPER: Let me add to what the Commission's
statement and on particular with the DriftWatch. It is
voluntary and there's a BeeWatch, there's a FieldWatch and
it deals with pumpkins and anything that's sensitive or organic. It's voluntary but a lot of us use it also because if we're out there spraying we want to know what the wind drift is. We'll record onto that site what the exact time, date, temperature, the weather location and weather is to help us, protect us from any type of liability situation. But they're both good, but they're a neighbor to neighbor, a voluntary at least in our state and it's DriftWatch. Thank you.

MR. GOEHRING: They are voluntary.

MR. KEMPER: Yeah. At least it has been.

MR. REDDING: Yeah, no, thanks. Lauren?

MS. BATCHA: I just have a follow-up question for Doug in terms of participation rates. Do you have any data at this point yet about the rate of participation?

MR. GOEHRING: Yes. Mr. Chairman? Laura, it's really high. We, we actually document well over 600,000 beehives in the state through that system. All of our vineyards in the state and most of our organic production. But again, it's voluntary so it's just good to know where it's at so that people can be more respectful, cognizant of what's in that area so that they're out spraying in the right conditions and less likely to do harm.

MS. BATCHA: And one follow-up if I may, Russell, is that okay? And does it have a, I use this term lightly,
a social component so that users in proximity can have like
a direct communication through the system or is it all data
in and then you pull data out and look at it?

MR. GOEHRING: We have like pins so much when you
pull up your GoogleMap and it'll pin something. You can put
your cursor on that and it will pull up what it is, if it's
a bee, if it's organic or if it's a vineyard, and it will
also have the contact information of whose field and hives
that might be. And then you can contact them and there's a
lot more interaction. And especially with the beehives
because we actually require that in law that that
information's there so that a pesticide applicator can call
them and say, hey, I would like to spray there in five days
or in two days, can you block, net or move those hives so
that we don't have any harm to the bees.

MS. BATCHA: Thank you.

MR. REDDING: Missy, did you have another
question?

MS. HUGHES: I'm sorry.

MR. REDDING: Okay. Barry?

MR. BUSHUE: It might -- Barry Bushue. It might
seem a little nebulous I guess but trying to bounce off what
Laura was saying and where Doug was coming from. Incentives
don't always have to be monetary and they don't always
necessarily have to be positive. I mean, I'm thinking of an
anecdote. In Oregon Doug talked about wine grapes and years ago there was a real challenge between wheat producers and a newly established wine area regarding 2,4-D. They settled that by merely sitting down around a table and determining that they would notify each other of when they were going to spray and they established a set of times that we normally involved in bud-break for the wines and the wheat guys decided that that was a reasonable expectation and there was no spraying.

More recently in the valley there has been a number of challenges and the disincentive proved to be when a small group of wine producers went immediately to the media and damned every other form of agriculture on the face of the earth, obviously that's an exaggeration, but were very, very critical of the industry as a whole and the disincentive for them proved to be that not only did the legislature push back very, very hard against them, so did the agriculture industry and the incentive became that the rest of the industry recognized that you could do this voluntarily without having to throw each other under the bus. As a result of that, there was a lot of work done by our Department of Agriculture and our commissioner to set aside some responsible methods by which people could work together to do that. So, you know, I guess the incentive was recognizing that you don’t need to go nuclear on your
neighbors. And so I think that was a, that proved to be very successful in the end and these voluntary methods continue to work over and over and over again.

MR. REDDING: Well, it sounds like there may be some lessons we can borrow. All right. So, that would be a good state, local action, however that sort of found resolution. Are there other sort of state examples? I mean, things that your states are doing that would maybe have some transferability to the question of coexistence?

Mary-Howell?

MS. MARTENS: Yes, but not necessarily helpful.

MR. REDDING: Then, okay, keep it to yourself.

MS. MARTENS: Because Barry reminded me of a nuclear battle we're in the middle of right now, one of our neighbors who is a wine grape producer has been told by extension that Asian lady beetle, which one Asian lady beetle can wreck a whole vat of wine because of its smell, its aroma, is the result of the fact that soybeans are grown in the area. And because we are one of his neighbors, he has been going around and telling all the neighbors that he doesn't think we should be growing soybeans any longer because the stakes are high for him.

Had extension had a little bit more restraint and a little bit more practical information about what the real risks are and where these lady beetles are coming from, what
the tools are that a wine grape grower can grow, can use to
defend themselves rather than just saying, you know, it's
the fault of your neighbors because they grow soybeans, I
think both the results would have been better for Johannes
and also for us. So, again, we come back to some sort of
neutral guideline that will take some of the hot-button
relationship issues out of it and also give agencies like
extension tools to use so that they aren't going out and
saying things that can be blown out of proportion. We need
to have good information to distribute so that agencies can
be more or less on the same page and farmers can hear a
coherent message that they can use. Because in this case
the bit of information that extension had was probably
technically sort of right but it was not being used in a
responsible way.

MR. REDDING: Okay. Other state experiences,
state programs as examples? Josette?

MS. LEWIS: Josette Lewis. I don't have a state
example other than the previous one I gave on water
management in the state of California divesting the decision
making down to the local level, even though there's a
regulatory requirement at the state level. But it strikes
me in thinking about our work plan going forward that
going some state secretaries or commissions of ag in
addition to the ones that we have here would be a useful
process because ultimately we have very little authority as a regulatory, or as an advisory committee at the USDA. So somehow we have to get them motivated and understanding where their motivations lie. So thinking about which ones might be good ones to seek out, either based on where the problems are most acute on these issues or where there are examples from, you know, the bee management plans, MP3s, or others. That strikes me as an important thing. And then I would also be very interested in examples from different types of grower organizations. Because they play, in my experience, a very important role among their members in educating, and I mean diverse ones. I mean, we have some represented here obviously but looking at some of the diverse examples that grower organizations have used to educate members about best management practices and tools that are available to them strike me as another kind of piece of work that would be useful to hear from as we schedule additional meetings.

MR. REDDING: Yeah. Barry?

MR. BUSHUE: You know, in all this discussion -- Barry Bushue, sorry. In all this discussion about local it does create an opportunity for neighbors to work collaboratively but with all the discussion that's going on certainly in Oregon and I think nationally about local control of a lot of things, taxation, minimum wage, labor
regulations, pesticides, GE versus non-GE in that is an inherent challenge to both deal with it locally but not allow or not end up in a situation where each little small local entity has ultimate control over the broader based infrastructure of agriculture. So I would just ask that we kind of maybe keep that in mind because there's a few paths that we could end up in that would not necessarily benefit agriculture as a whole or even our own individual members that we represent as Missy pointed out. So, local is great for neighbor to neighbor. It may not necessary best for local legislative or committee or commission or discussions in terms of county regulatory processes.

MR. REDDING: That's a good point, thank you.

Laura?

MS. BATCHA: This is just a work plan process suggestion as to perhaps we could look at the NASDA annual meeting in September in terms of how our work flow works. I just note that I don't know whether or not we're allowed to co-locate a meeting at another meeting or would be an opportunity for us to hear from stakeholders of all the 50 states in terms of the state level agriculture leaders or just noting it as we look at our work plan.

MR. SCHECHTMAN: I would just make the point that next September is mighty late in the process and in the remaining time that we have here. I certainly take the
point and maybe there are some ways to bring the states here if we can't go to the states if we need to do so by, for reasons of time.

MS. BATCHA: I think there's a winter policy meeting as well that comes up. But just some formal engagement there might be helpful.

MR. SCHECHTMAN: Yes.

MR. MCKALIP: And I’m aware of no prohibition on us, you know, co-locating a meeting essentially where other target rich stakeholders might be there anyway. So --

MR. SCHECHTMAN: Only cost.

MR. MCKALIP: That's correct, yeah. But we can have those conversations.

MS. BATCHA: It jumped out at me because our calendars did go to September, so.

MR. BUSHUE: I was thinking the same thing, Laura, I'm saying we've got September on here.

MS. BATCHA: Yeah.

MR. REDDING: Angela?

MS. OLSEN: Angela Olsen. I like Laura's idea, a lot of NASDA. It seems that there may be, and based on the presentation that we heard during public comments too, maybe there is good value in having NASDA come in and speak to us about some of these programs now that the charge is out there and some ideas that NASDA may have as well including
the pollinator program but perhaps there's others that would be helpful. Maybe it's NASDA, maybe it's additional groups as well. So, I think there would be a lot of value in that. I like that idea.

MR. CARLETON: Just a follow-up on that?

MR. REDDING: Yeah, Ron, please.

MR. CARLETON: Yeah, just very quickly. That winter policy conference is the first week of February which probably poses problems as far as the group getting together. But the question is, is there some mechanism while you've got 40 to 45 state ag commissioners in town to somehow plug into that and utilize that. So, I just throw that out.

MR. REDDING: Yeah, some update to them just on like we had today in some abbreviated form probably is a good thing. Yeah, we could do that but I was thinking sort of the USDA agency just because I think there's some really good work being done that puts in context this question, right, because you'd want to sort of put this at an appropriate spot that we're trying to address the issues of coexistence and that engagement. But it's also understood that you have some other things occurring like, you know, the seed purity question and risk management, et cetera, but a good point, yeah. Maybe even surveying them, I mean, the absence of and given our timelines, you know, there are some
things and each state has, you know, some good work being done. The question is, do they see the connection between, you know, what this task is and the coexistence planning and another effort that can be borrowed or at least mirrored potentially around pollinator plans or conservation work, pesticide education, et cetera. But, it is, you know, it's not, it is a unique task with the, in some respects, but not so unique in others, right. I mean, you're really talking about general engagement, raising awareness, very thoughtful approach and intentional actions being taken by producers.

So, if we do that around conservation planning, conservation districts do that every day around conservation work. We're doing it in 41 counties in Pennsylvania around the Chesapeake Bay and intentional planning, plan and planting. So there's a lot of areas where I think we could probably look at what we do at the state level that could be borrowed for this task here. I would be also interested in other countries, right. We focused on local and state, you know, but we had a presentation at one of our previous AC21 meetings that looked at some international efforts. I don't remember all the detail but there were clearly some local, in their respective countries, around this issue, right, that we shouldn't sort of rush past that. So, Barry is interested in this topic.

MR. BUSHUE: No, I was just thinking that since
the Secretary's Office here has decided we could relocate, New Zealand has a wonderful opportunity in terms of its seed production and seed protection, IP work that we could all go and study. I think it'd be an awesome idea. We can all agree on that.

MR. REDDING: Okay. There were some poster sessions during the March workshop and I have forgotten, took pictures of each of those but they were around the issue of coexistence and one may have been the alfalfa, one was Oregon I think but there were a couple of poster sessions done by researchers. So, we should look at those again just to make sure if there's something we could borrow or is being done in support, again, in this charge on the planting. Okay. Angela?

MS. OLSEN: Just another process question. I always like to know sort of the parameters so that we're really delivering to the Secretary's Office. Is, I'm trying to think about, does this include all commodity crops? Does this include colored flowers? You know, when we talk about coexistence, and it could be very, very large, I want to make sure as a group that we're not boiling the ocean and that we're coming back with some really solid recommendations. So, is there any additional guidance that can be given to us, and perhaps that guidance is coming tomorrow, is it specific crops, is it all crops? We know
that it's across all cropping, you know, farming methods but does it include colored flowers? And I don't think that, I mean, that's not what we've talked about at the table but I could see that that could come into it. I'm just throwing it out there. How broad or narrow is it so that we're really delivering.

MR. MCKALIP: I don't think we've intentionally limited that scope but I think that's a good conversation to have especially as we get into the work plan discussion tomorrow just to make sure that, you know, you use the term boiling the ocean, we don't have a task that is too broad that can't realistically be met given the timeframe. But I don't think we wanted to limit that ourselves. I think that we need to hear from you what's appropriate.

MR. REDDING: Okay. Any other sort of clarifying questions that you feel you need based on what you heard today about the charge? So as we enter the next, you know, days' conversation, I mean, our objective tomorrow will be, obviously we'll hear from the Secretary but we want to pick up on this conversation. I just ask you to think about overnight, I mean, the overarching charge that has been laid out. And think of it from your own perspective. You know, what is it that you need to really understand further that would allow you to come back, I think some work in between, but come back to the table, you know, with some guidance to
us in furtherance of this task, right. What is it that you
need to know, right, that you don't have today. And there's
been some really good ideas sort of floated that we need to
sort of look at and explore for sure. But just think about
that overnight, please, so we can look at both the charge,
look at the additional information that's needed if we're
going to be meeting two, three times with the objective of
wrapping this up within 2016 so we can deliver a product to
the Secretary. What is it we need to have in hand, right.
So when the work is done and I’m making the assumption that
all that we heard today in terms of other recommendations
and concurrent actions continue. And we did hear from a
number of the USDA staff that, you know, there will be
reports and published as well as work continuing and they
will report back to us. So, look at this task in
complementing that existing work. What else do you need,
what do you want to do, right, to make sure that we have,
again, as we did the last time I think, you know, our best
thinking at the table. There can be some disagreements as
to how that is all positioned but I want to make sure we
have good, robust conversation about our task here and give
to the secretary and to the USDA what we believe to be, you
know, the best ideas around how to facilitate that joint
coeexistence plan, right. So do you feel like you have what
you need? You've heard the discussion today, you've got
some ideas. Yes? Okay. Michael?

MR. SCHECHTMAN: Yeah, I'll just add one thing and that is, have heard mention of a lot of possible sources of information that might be useful. It would be great if the folks around this table, thinking about it tonight or tomorrow, can really distill down the list of things that you think we should be gathering together either as background information for you or in terms of presentations that we can efficiently provide to you so that we don't spend an entire meeting just giving you presentations and you have no time for discussion and moving forward. So we want to figure out the most efficient way to get you what you need so that you can make progress efficiently.

MR. REDDING: One point I would make I guess and it came up several times and that was around sort of the, you know, the stakeholders in this conversation as in the previous conversations it's broad. Right, I mean, meaning the tech providers, I mean, the farms, the state, the USDA. I think in our work previously, you know, we had really taken a pretty broad approach. And I would ask the same here as we think about this task is that what, what can the, you know, individual stakeholders do that collectively lead us to, you know, the coexistence plan, right, joint coexistence. Joint could be both between landowners but also joint between industry partners and farm, right. So,
think of joint as being broader than just an occupation, right. It really is multiple components could be in a joint plan.

And what does that look like? Does that change the conversation at all today if you think about that piece of it. To me the joint, back to Lynn's point about, you know, the more the person that's marketing my product knows about what I'm doing, right, and the protection of that that is a joint plan, right. If there's two landowners, two producers, multiple producers that is also a joint plan. Having some relationship with the person who is, I'm buying the technology from, that is a joint plan. So I'm going to take a very broad approach to what is a joint plan. And this has evolved this afternoon as I was thinking again between producer and producer and I think we even intentionally said that.

But I would just ask in this conversation as we look at the responsibilities I think it is much bigger than that. And the joint can be multiple stakeholders in that conversation, right. If you borrow the pollinator plan that is a very different sort of joint plan by stakeholders around that particular issue, right, they're interests. And part of the incentive may be that incentive of where is my joint interest with somebody. Ideally, it is between producers and we'd look at that as a community. The joint
in this case may well be the person that I've got an
obligation to and/or is providing me a service. That can be
part of the plan. That's a little different than where
we've been but I think that is within keeping I think what
the Secretary's charge of how do you, in furtherance of
engagement around this coexistence, in furtherance of and
what's the stakeholder group around that. So, be thinking
about that if you would, please, overnight. Because it will
help guide us I think to where we can look, where we should
look around the development of and the facilitation of such
a plan.

It's part curriculum, it's part education
awareness but it's also that level of commitment that I have
as a producer to somebody else. But it's also, that is, the
reverse of that is true as well. Folks have an obligation
to me who are selling product, services, marketing and you
can put your own parameters on what that looks like, right,
but I think that's part of what we have to think about here
in terms of joint coexistence plan. Okay? And any final
thought? I mean, I don't want to, you know, run the clock
to five if folks are sort of thinking that they know the
charge and today, laid that out, you feel like you're
briefed on where the recommendations are that we've made and
our task for this new session of AC -- it's not new in AC21,
it's the same group but it's a new charge. Did you feel
that you're comfortable with where we are?

MS. MARTENS: Just thinking about efficiency of information. If ideas, if ideas occur to us at night is there a way that we can pass these on to you by e-mail and have you kind of coordinate them tomorrow? I mean, I've got, just as you've been talking I've had a number of things that, of pieces of information I'd like to have. And it'd be nice to make a list of it but probably it'd be more effective if we could start doing it in writing. I was just wondering if that would be a possibility that we all could maybe brainstorm things we don't know in order to make this happen.

MR. SCHECHTMAN: I'm not sure how much time we'll have to gather all this together, that's right, if we're enjoying each other's company over dinner. But certainly we can, if people are thinking about all of those things we can sort of start off by, you know, the list, you know, having a collective list-making exercise and seeing --

MR. REDDING: We can just see tomorrow morning, that's --

MR. SCHECHTMAN: Yeah. Sort of first thing in the morning we can have a collective list making thing. One thing that I would just add to that is I think something that would be very useful for us is really to think about where there are sources of incentives that we may not have
thought about. We are, in USDA, somewhat short of direct incentives as we've said. If there are things that are available at the state or local level that might be repurposed for this or that might meet other needs as we heard in the case of the conversation program if there are opportunities for these sort of joint benefits at the state or local level that will be a great thing to know about as well.

MR. REDDING: Okay. Final comment? Folks who are joining for dinner, any further instruction?

MR. SCHECHTMAN: Once we're off the record.

MR. REDDING: Once we're off the record we will get further guidance. Otherwise, thank you again for being here, being reengaged in the AC21 process and serving. It really is important and I think the conversations of the day sort of remind us that we many times think this belongs to, it's somebody else's problem to solve, right. And what the AC21 is doing is really creating a forum for us to think through constructively these big issues of our time, right. It's a challenge to farm, it will continue to be a challenge but we also want to make sure that we don't lose sight that what we said in the original report that it's important to respect, each farmer has a right to choose a system that works for them. And respecting that and protecting that is really the work of this committee and this is another piece
of this conversation we want to stay focused on. So, thanks
for being at the table and I look forward to the
conversation tomorrow. Okay, we stand adjourned.

(Whereupon, at 4:39 p.m., the meeting was adjourned.)
Digitally signed by Brandon Fields

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ADVISORY COMMITTEE ON BIOTECHNOLOGY

AND 21ST CENTURY AGRICULTURE

By:

Brandon Fields, Transcriber