

Advisory Committee on Biotechnology and 21st Century Agriculture (AC21)
Plenary Meeting
June 13-14, 2016

U.S. Access Board Conference Room,
1331 F Street NW, Suite 800
Washington, DC 20004
Meeting Summary

On June 13-14, 2016, at 9 am, the United States Department of Agriculture (USDA) convened a plenary session of the Advisory Committee on Biotechnology and 21st Century Agriculture (AC21). The meeting objectives were:

- To consider work of the three *ad hoc* subgroups on the progress of their analyses relevant to the new AC21 charge;
- To discuss a draft outline for the committee's next report and selected draft content, including a draft guidance document for producers and a draft model for facilitating local conversations around coexistence; and
- To continue overall discussions on the committee charge and planning the completion of its work.

The AC21 includes representatives of industry, state, and federal government, nongovernmental organizations, and academia: Mr. Russell Redding (Chair), Ms. Isaura Andaluz, Ms. Laura Batcha, Mr. Lynn Clarkson, Mr. Leon Corzine, Ms. Melissa Hughes, Mr. Alan Kemper, Mr. Douglas Goehring, Dr. David Johnson, Mr. Paul Anderson, Dr. Gregory Jaffe, Dr. Mary-Howell Martens, Mr. Jerome Slocum, Ms. Angela Olsen, Mr. Keith Kisling, Dr. Marty Matlock, Mr. Charles Benbrook, Dr. Josephine (Josette) Lewis, Mr. Lynn Clarkson, Mr. Barry Bushue, and Dr. Latresia Wilson. All members except Ms. Andaluz, Mr. Goehring, Dr. Jaffe, Ms. Martens, and Mr. Matlock were in attendance. Dr. Kelley Rogers from the National Institute for Standards and Technology, Department of Commerce, attended as an *ex officio* member. Dr. Michael Schechtman participated in the two-day session as the AC21 Executive Secretary and Designated Federal Official (DFO).

A full transcript of the proceedings will be prepared and will be made available on the AC21 website at <http://usda.gov/wps/portal/usda/usdahome?contentid=AC21Main.xml&contentidonly=true>.

Below is a summary of the proceedings.

I. Welcome and Opening Comments

Dr. Schechtman convened the meeting and welcomed all present. He noted that for the first morning of the meeting, the Chair, the Honorable Russell Redding, Pennsylvania Secretary of Agriculture, was called away for a meeting with the Governor of his State, but would arrive in the afternoon. In the interim, he, Dr. Schechtman, would serve as Chair, as provided for under the Federal Advisory Committee Act (FACA). He also noted that Doug Mckalip, Senior Advisor to the Secretary, would also arrive a bit later. He indicated that comments submitted in writing by the public prior to the meeting were available for viewing by AC21 members and attendees.

Dr. Schechtman reiterated the overall mandate of the AC21, described its previous work on coexistence, and noted that the report on that work, issued in November 2012, contained many important and interconnected recommendations, among which was the recommendation that USDA should incentivize the development of joint coexistence plans among farmers. He noted that USDA's Office of General Counsel had indicated that USDA lacked the statutory authority to do this. As a result, the new charge, issued to the AC21 in December, 2015, asked for recommendations on how States and localities might promote the development of such plans and how USDA might support those efforts. He noted the objectives for the meeting, namely

- To consider work of the three *ad hoc* subgroups on the progress of their analyses relevant to the new AC21 charge;
- To discuss a draft outline for the committee's next report and selected draft content, including a draft guidance document for producers and a draft model for facilitating local conversations around coexistence; and
- To continue overall discussions on the committee charge and planning the completion of its work.

He noted that there is very little time to complete the work during this Administration so that the AC21 needs to work cooperatively and efficiently.

Dr. Schechtman observed that significant progress had been made at the previous AC21 meeting, at which elements were identified that are to be included in the upcoming report addressing cooperation and coexistence. These include two documents that can also function as stand-alone documents: a guidance document intended for farmers producing identity-preserved (IP) crops discussing production requirements and conversations with their neighbors; and a model for convening and initiating, in perhaps a community or local context, conversations regarding farm management issues, including, but certainly not limited to issues related to pollen movement between neighbor's fields. Plus, other context pieces would be provided.

He noted the available meeting documents:

- The Federal Register meeting announcement.
- The meeting agenda

- Biographies of all the current members
- The AC21 Charter
- The AC21 Bylaws and Operating Procedures
- The previous report produced by the AC21, entitled, “Enhancing Coexistence: A report to the Secretary of Agriculture.”
- The meeting summary from the March 14-15, 2016 plenary session of the AC21.
- A package of meeting summaries from all of the conference calls held intersessionally for the three subgroups—five summaries in all.
- A notional outline for the overall report in preparation, focusing on the proposed elements of the report outside of the two stand-alone guidance pieces.
- The current version of the draft guidance document entitled, “Factors for farmers to consider when you or your neighbor is growing an identity-preserved (IP) crop.”
- A rough first draft of the other document on a model for convening local conversations, developed using materials from an AC21 member, North Dakota Ag Commissioner Doug Goehring, plus recommendations from the Models subgroup, and also incorporating work from the Venues and Conveners subgroup as well.
- A draft portion of text on a set of “difficult” or “complex” issues” that have been raised by committee members as important for the future or important for setting context, or meriting a longer discussion than would be appropriate in the stand-alone pieces.

He summarized the two-day agenda for the committee, noting the public comment period later in the day and the time to be devoted to a discussion of the completion timetable for the report toward the end of the second day.

II. Updates on Biotechnology Regulatory Developments Within USDA and Elsewhere in the U.S. Government

The AC21 next heard from Mr. Michael Gregoire, Associate Administrator, USDA Animal and Plant Health Inspection Services (APHIS), who spoke about biotechnology regulatory developments within his agency since the last AC21 meeting. He noted that APHIS had recently deregulated 2 lines of GE corn: a Syngenta corn carrying insect resistance and glufosinate tolerance traits, similar to a previously deregulated line; and a Monsanto line resistant to the herbicides dicamba and glufosinate. The agency has now deregulated about 120 products, with only 3-4 petitions still under consideration.

He noted that APHIS has recently issued new “Am I Regulated?” guidance. The new guidance does not change policy, but provides more details on data and information requirements, such as citation of confidential business information, in submitting such queries.

He noted media interest in two recent “Am I Regulated?” responses, one for a Pennsylvania State University-developed white button mushroom and the other for a DuPont/Pioneer waxy corn variety developed using CRISPR technology. APHIS determined that the products were not plant pests and therefore not regulated, as no material from plant pests was inserted into genes of the final products. These responses were consistent with responses to previous letters of inquiry for other products. APHIS informed inquirers that they still may be subject to FDA or EPA regulation.

Mr. Gregoire described APHIS' plans to prepare a programmatic Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) associated with its efforts to update its biotechnology regulations at 7 CFR Part 340. The public comment period for the Notice of Intent (NOI) to prepare the EIS was extended by 45 days, to a total of 75-days. The NOI solicited input on 4 regulatory alternatives: 1) no action, 2) a regulatory system under which APHIS would analyze based on plant pest and noxious weed risk, and then regulate organisms with those types of risks, 3) expand the scope and regulate more biotech products through permitting, 4) eliminate separate biotech regulations and use existing regulations for plant pest and noxious weed risk to assess new technology. In response to the request for comment, APHIS received 126 unique submissions from a broad swath of interests, including two large petitions and identical form letters which requested for mandatory safety testing and regulation covering liability for contamination issues, among others. Trade groups tended to support alternative 1 and oppose alternative 3; academic/professional groups tended to support options 2 and 4, as did biotech developers (with more limited support); Non-Governmental Organizations opposed alternatives 1,2,4 and gave some support to alternative 3 while generally not feeling it went far enough. Many comments expressed interest in the definitions used and the terms defined, and there were also comments about the use of noxious weed authority and weed risk assessments: there were varied thoughts about implementing this authority, comments on what organisms should be subject to review and permitting, and suggestions for exemptions from regulation. APHIS is analyzing comments and working on a draft proposed rule, which is under review at USDA, and working on a draft EIS. Once internal USDA review is complete, the package will move to the Office of Information and Regulatory Affairs (OIRA) at the White House Office of Management and Budget, and after clearance on to publication.

Dr. Schechtman then described a study released by the National Academy of Sciences (NAS or the Academy) on May 17, 2016 entitled "GE Plants: Experiences and Prospects." The Academy commissioned this study independently, and it was largely funded by the Academy and independent foundations. It took a close look at assertions made about the risks and benefits of GE crops and the studies thereof. The main findings were that there is no persuasive evidence of any difference in human health and/or environmental risks from GE production. The study noted the environmental benefits from the use of insect-resistant crops as well as the management benefits and weed resistance issues arising from the widespread use of herbicide-tolerant crops. The study also discussed socio-economic impacts and claims that use of GE crops had increased crop yields. The report noted that new breeding technologies have blurred the distinctions between traditional breeding and GE crops, and recommended a tiered approach to risk assessment.

The Academy took great pains to listen and respond to public comments in its report and explicitly noted where and how each was addressed. Also, because of public interest, the Academy is going to great lengths to make the report accessible to the public.

Dr. Schechtman then provided another update to the AC21 on the White House-led effort, initiated in July 2015, to modernize the overall Coordinated Framework for the Regulation of Biotechnology. The initial White House memo called for establishment of a Biotech Working Group including representatives from EPA, FDA, USDA, and Executive Office of President with tasks: to update the

Coordinated Framework to clarify the current roles and responsibilities of the agencies that regulate biotech products; to develop a long-term strategy for regulating future products; and to commission an external, independent analysis of future landscape of biotech products. The memo also affirmed the existing principles on which the Coordinated Framework is based.

All these efforts are underway. For the first task, that of clarifying current roles and responsibilities, Dr. Schechtman noted that there are classes of GE products in existence or under development that were not even contemplated during initial creation of the Coordinated Framework. With respect to the first two tasks, 3 public meetings have been held around the U.S., discussing the update process, case studies, and long-term issues. Developing a long-term strategy is an ongoing process, looking to the future: being ready for new technologies, coordinating better, and reaching out to the public. For the third task, the NAS has been commissioned to review the future landscape of biotech products and has initiated a project entitled "Future Biotechnology Products and Opportunities to Enhance Capabilities of the Biotechnology Regulatory System." This effort is separate and distinct from the NAS report discussed a few minutes earlier. A study panel has been formed and 3 meetings held. The report is expected within one year. The expectation is that the update on current Agency regulatory roles and responsibilities will be published this summer for public comment, along with a long-term strategy document looking at future work. It will include all information discussed at public meetings, including case studies.

An AC21 member inquired as to how APHIS will regulate biotech plants produced using new breeding technologies. Mr. Gregoire answered that the desire has always been to have a regulatory system which is product-based, not process based. APHIS has not identified a way to do this perfectly and is wrestling with ways to address comments without regulating products of traditional breeding, long known to be safe. The agency is also consulting with international partners, who are also wrestling with similar issues and are updating their regulatory systems.

An AC21 member inquired about a glossary of biotech terms found on USDA's website and asked how USDA arrived at definitions and how they will be updated. He noted some confusion on terms like GMO, and on the use of different definitions. Dr. Schechtman responded that the definitions on the website were reviewed by an inter-agency group, but if/when there is an update to APHIS regulations, the page will be updated. The use of terms and the scope of regulations have been ongoing topics of discussion for several decades.

An AC21 member offered the view that products derived through gene silencing or CRISPR technologies are generally being included in CODEX and trading partners' definitions of regulated GMOs, and this could become an issue for coexistence. He suggested that in the AC21 report, the committee should highlight this issue and potential implications of the United States having a different definition of GE from that under CODEX or used by our Asian trading partners. He further inquired as to what detection technologies exist for identifying products produced through these technologies to allow end users to avoid them. Dr. Schechtman responded that USDA has engaged with trading partners on these issues and few countries have determined whether gene editing techniques are subject to regulations. No country has definitively stated that they will regulate gene editing technologies as GE/GMO. Countries

recognize the importance of the issue and much work needs to be done to achieve a common definition. Moreover, gene editing encompasses a continuum of techniques, not just one approach. In the European Union (EU), several Member States have expressed a desire not to regulate many of these products. The European Commission is developing a legal opinion. As for detection testing, for many products existing technology is unlikely to be commercially useful. It is unclear what countries will do if they establish regulations in this area that will be difficult to enforce.

An AC21 member inquired whether the American Seed Trade Association (ASTA) has established a policy on gene editing techniques. Dr. Schechtman responded that it is his understanding that ASTA is very interested in the technologies and sees them as important for breeding for a wide range of crops and for democratizing the availability of tools for crop breeding and speeding up the breeding process. Another AC21 member observed that issues around new breeding technologies are rapidly progressing. The National Organic Standards Board (NOSB) is in the process of revising its definitions of biotechnology/excluded methods, and every draft has contemplated including gene editing/CRISPR technologies in the list of excluded methods. According to this member, this could cause domestic difficulties, if APHIS were to use a definition whereby it would not regulate a particular product and the product cannot be discovered through testing, yet the organic industry requested its exclusion from allowable methods. The most recent NOSB meeting included a panel on issues surrounding biotechnology and included perspectives on accelerated breeding techniques for specialty crops. She further inquired whether APHIS' responses to regulatory status inquiries for white button mushrooms and waxy corn would set a precedent, having been issued while Part 340 is under revision. Mr. Gregoire responded that during the process of developing new regulations, which may take multiple years, USDA must still operate under existing regulations. Under the existing regulations, in responding to such queries, APHIS asks whether a plant pest is used as a vector or whether the organism presents a plant pest risk. There is no reason to believe either product presents a plant health risk. The AC21 member followed up by noting the challenges that could be posed if APHIS' regulatory scope were to differ from the scope of mandatory labeling under pending Congressional legislation.

An AC21 member stressed the need for precise terms and definitions when discussing new breeding technologies, and noted as an example the important distinction between gene deletion and gene silencing. Dr. Schechtman responded that gene editing encompasses a robust set of new technologies which can be used in a variety of ways--to delete a gene, to silence a gene's expression, to insert a gene from an unrelated species (much like what is currently considered GE), or to induce changes that could occur in nature, such as single base-pair change.

The AC21 member further noted that the Federal government is undertaking a substantive review of the issue of herbicide resistance: on this topic EPA currently has two notices out for public comment. He suggested that USDA had issued a policy statement which should be noted in the report as a component of an emerging nationwide issue. He requested that the USDA policy statement on this subject be shared with the AC21. Dr. Schechtman indicated that he would find the material and share it via Email. (Note: The document was located and copies were provided to the committee on the morning of the second day of the meeting.)

An AC21 member noted that with respect to new breeding technologies, APHIS is reviewing the issues within a plant pest and safety framework while organic standards and labeling efforts focus on market standards, and there is a difference between the two efforts. Another AC21 member noted that many requirements of a process-based system like organic production cannot be verified through testing. He inquired as to what would make this requirement different than others. Another member responded that the primary issue is not testing, but rather that definitions may result in products where disclosure of breeding process is not available. Many different parameters are tested during investigations in organic production, including nitrogen sources in farm inputs, antibiotics, hormones, pesticides, GMO presence, etc.

An AC21 member suggested that the committee report should include a statement that all farmers strive to do all they can to keep domestic and international markets open, including those for conventional, organic, and GE products.

III. Reports From 3 *ad hoc* Subgroups on Their Intersessional Work and Discussion

AC21 member Lynn Clarkson reported on the work of the Guidance Document subgroup, which had met multiple times so far. The subgroup's work started from a description of systems used for identity preservation and used it as a skeleton to address varied issues. He noted that in the course of the discussions, there have been areas of disagreement and "sharp points," but many of these have been eliminated and the focus is on good communication. The subgroup had worked on seed issues and provided updates on seed markets. He noted that many vendors currently offer non-GMO/non-GE seeds from foreign sources: it is increasingly difficult to obtain seed domestically. He indicated that several questions, including some of the seed discussion, had been deferred to Dr. Schechtman to be elaborated on elsewhere in the document in a way that balances perspectives of subgroup members and presents them for fair consideration.

Two other subgroup members commented to voice support for the resulting Guidance document. One noted that the document cannot be prescriptive, and the desire was for a framework that could be adapted to local conditions, respecting variability in local conditions and adaptable to those conditions. The second subgroup member then noted that one bullet in the section on Meeting IP requirements discussed minimizing pollen flow to an IP crop, when it should more correctly discuss minimizing pollen flow to or from an IP crop. Dr. Schechtman thanked him for the correction and noted that there would be time for discussion of specifics in the text later in the day.

AC21 member Laura Batcha reported on the work of the Models and Incentives subgroup in its two meetings. She noted that at the first intersessional meeting the subgroup had discussed how to take its initial discussions and incorporate additional materials. The subgroup had recognized that State MP3 Pollinator protection plans offered a useful approach, but that additional material, such as from the draft National Corn Growers Association (NCGA) coexistence policy, would also need to be incorporated.

The subgroup recognized the importance of framing information with inclusive language--as mitigation strategies rather than best management practices. They also noted the importance of providing some sort of incentives for local discussions and recognized a role for USDA in signaling to local offices that they may have a potential role in assisting local discussions.

On its second conference call meeting, the subgroup had discussed a local discussion model draft that had been initially developed by a subgroup member, North Dakota Agriculture Commissioner Doug Goehring, incorporating materials from the NCGA document and elements of the pollinator plan approach. Subgroup members recognized the good work done and noted that the approach broadened discussions beyond solely issues of pollen flow in order to bring all parties to the table. There was some concern that the shift had perhaps gone too far from the original purpose, so that the core issue of pollen flow needed additional emphasis. There was also discussion that the document could emphasize that with respect to farmer choices, farmers may not be producing for only a single market, but may be producing different crops for multiple markets. A revised draft would need to emphasize choice, enhanced communication, respect, and practices. Dr. Schechtman agreed after the second call to revise and flesh out the subgroup's draft based on the discussions.

Dr. Schechtman noted that at the previous plenary session a suggestion had been made that the models subgroup might take a role in assembling the pieces of the final document. He noted that the AC21 would need to discuss how much assembly would likely be required based on current progress, and if additional work by the subgroup in this way would be helpful. It was not resolved at this point.

AC21 member Leon Corzine reported on the single meeting of the Venues and Conveners subgroup, which had been given an additional task of discussing potential sources of support for convening local coexistence discussions. He noted that it had been a good discussion, with most members participating. There had been discussions of various potential funding sources, including the potential use of resources allocated for specialty crops. Subgroup members recognized that it would often be best to hold coexistence conversations in conjunction with other meetings. There had been discussions about USDA making the holding of coexistence discussions a funding priority, but there was concern that such an action might displace other priorities in a resource-limited environment. He also noted some sensitivity about bringing in outsiders to local discussions who would be labeled "experts" and noted the need for such a usage to be carefully defined. Dr. Schechtman noted that the possibility of Specialty Crop Block Grant funding was not included in the document that members had before them for review because it had not been possible to confirm the usability of such funds for that purpose as yet.

At this point in the meeting, Dr. Schechtman welcomed the arrival of Doug McKalip, Senior Advisor to the Secretary. Mr. McKalip thanked members for their continued efforts. He noted that this was Secretary Vilsack's eighth year as Agriculture Secretary, and that in recent Senate hearings the Secretary had highlighted coexistence as a key issue. He also noted that USDA has been in discussions with the Senate Agriculture Committee around labeling issues. Staff has been focused on forging a path ahead in short order, with a view toward a timely resolution given that Vermont's GE labeling law will be coming into effect in two weeks. USDA's desire is to see clear messages for consumers and flexibility for manufacturers.

IV. Discussion of Parameters for Review of Draft Documents

Dr. Schechtman noted that much work has been done on the key features of an approach to address the Secretary's charge to reflect the overall discussions and agreed-upon themes. He reminded AC21 members of the process for improving documents to meet the committee's needs, noting that the Bylaws and Operating Procedures provide that the report shall consist of elements on which there has been a consensus, as well as discussion of points where there was disagreement. Committee members will have the opportunity to review and improve the draft report. Reports are drafted by the Chair and DFO in an attempt to capture the views of members during committee discussions. Members will have an opportunity to review it as a whole and decide whether it is acceptable, and whether they wish to add an additional statement reflecting their concurrence or non-concurrence.

He added that what is sought is compromise and language that can be supported by the committee as a whole. It will be important for members not to act as editors and "wordsmith" the document, due to the short time remaining. The important information for him and the Chair to know will be if they have gotten the concepts and approach right, and are there concepts that need to be added. In addition, are there statements in a draft that a member can't live with, and if so, why not? He noted that once big-picture issues have been addressed, the drafters would be happy to address any additional specific matters of fact and/or typos. He stressed that member support would be needed to try to pull consensus out of spirited discussions.

An AC21 member commented that he had been pleasantly surprised by the draft documents, in that the spirit and substance of comments have been well reflected in the drafts. He added that he was somewhat troubled by the lack of attention to some more difficult and critical issues. He observed that while the consensus nature of the committee may preclude full inclusion of such issues, the underlying topics need to be raised in some way. Dr. Schechtman advised that the specific topics to which the member was referring should be raised during the time devoted to discussion of "difficult" and "complex" topics. Another AC21 member expressed appreciation for the Secretary's leadership and for the opportunity to serve. He requested that the report use positive language and focus on opportunities rather than challenges.

V. Discussion of Draft Guidance Document

An AC21 member inquired as to the role of the Guidance document and the model for local discussions document in the overall report and how the whole report will be tied together. Dr. Schechtman indicated that one piece that would tie the documents together in the report and which is as yet missing (and not yet included in the notional outline for the report) is a description of the committee's recommendations to the Secretary about how the stand-alone documents should be used and how USDA should go forward in talking about them. He suggested that time could be found in the schedule of the two days to discuss such recommendations.

An AC21 member expressed concern about the framing of the document, in that the issues are still primarily IP producer issues rather than joint issues. The framing could be changed to offer opportunity through joint coexistence plans to allow every farmer to make choices based on good information, allowing individual farms to choose multiple systems on their operation, which changes the focus from actions on opposite sides of a fence to different actions that might also be taken on an individual farm. She added with respect to organic production that the challenge is to increase domestic production to meet demand, so that it would be good for the document to suggest that farmers could consider whether transitioning a portion of their farm to organic would be an option for them. Dr. Schechtman noted that the genesis of this document had been as material to help IP producers to have access to facts. The suggested context broadening could be useful, provided the idea works for all members.

An AC21 member suggested that it might be helpful if the document further described what the committee means when using the phrase “diversity in agriculture” and explained why the concept is important. Doing so could bolster the rationale for suggesting that conversations about IP production matter. Another AC21 member cautioned that added text not be prescriptive. Another member suggested a rearrangement of text (moving Bullet V, Working with Neighbors, earlier in the document, after Bullet I, Opportunities) to avoid the need for rewriting or adding additional information.

An AC21 member agreed with the earlier assertion that expansion of IP and organic production will come from the existing agricultural base, and argued that since acres are not being added to production, coexistence among neighbors will really be coexistence among ourselves. He noted that many farms have biotech and IP, non-GE/non-GMO components, so there is no need to talk about opposing camps. Dr. Schechtman noted that such an approach was attempted in the draft Models document and could be incorporated in the Guidance document as well.

An AC21 member agreed with the suggestion about reordering sections. He recommended expanded discussion around the thought process of transitioning from one production method to another. He noted that the “Complex Issues” section discusses the need for neighbors to know the genetics in their seed to prevent market disruption and suggested that the next generation of coexistence issues may result from use of multiple herbicides now approved in traits, like dicamba and 2,4-D, and resulting pesticide drift issues. He suggested that these are manageable issues that need to be acknowledged in both the Guidance document and the full report. Two AC21 members then expressed the view that such spray drift issues are not new or emerging issues, and are recognized by all farmers.

An AC21 member suggested that the existing material in the draft document is complete and concise enough to adequately address diversity in production methods. Another AC21 member expressed the view that it would be helpful to expand on the rationale for supporting diversity beyond merely saying that it is needed. Another AC21 member suggested that it could be helpful to clarify and explain that diversity isn’t just between, but within, farms as well.

There was then a discussion between two AC21 members about whether there is a spot or open market for non-GMO corn/soy, similar to organic, or whether such production primarily takes place under contract. The situation, according to the discussion, is that retailers and processors, who have an

interest in predicting future supply, are expanding contracting operations. Farmers are still experimenting with growing such crops without contract to meet market shortages or fill open markets. With Asian market demands expanding, a significant percentage of non-GMO corn/soy is now being raised without contracts to fill in those shortages, and as a result, there are some surpluses of non-GE/non-GMO supply on the market. A request was made that the text be amended to reflect this understanding of the relevant facts.

There was discussion on whether the document should discuss both domestic and imported IP non-GE production. Several members noted that this seemed outside of the scope of the AC21's work. The suggestion was made that a bigger topic, how U.S. farmers grow products for international markets, should be included. Others agreed that this second topic should be included, though perhaps not in the Guidance Document. One AC21 member suggested that an important part of the committee's discussion is preserving opportunities and the right of farmers to pursue value-added markets. He suggested that there could be an issue with corn coming in from abroad, organic or IP, which does not meet the standards but is not necessarily identified as "fraudulent." Another member agreed that mentioning the issue somewhere in the report, though not necessarily in the Guidance document portion, would be important to set context, and that referencing international trade would not be out of scope, given the other elements of flexibility in the scope of the report that have been incorporated in other portions of the report around issues such as spread of weed seed, conservation tillage, etc. She inquired as to what others thought about the adequacy of coverage of seed issues and the issue of adventitious presence in seed in the current Guidance document draft, given the challenge of choosing appropriate management techniques without this knowledge. Dr. Schechtman reminded members that at the last plenary session, views were expressed that the Guidance document should be kept concise, with some material moved to the "complex issues" section to provide context. Coverage of issues which are not of prime relevance to farmers would be limited in the Guidance document. An AC21 member noted that this is a critical issue because of emerging market standards for non-GMO/non-GE. Not all seed companies need to provide the relevant information about their seed, because not all their buyers require it. This has created a market opportunity and at least two seed companies are offering purity guarantees. Very sensitive buyers are now acquiring seeds from Europe or from different production zones in the U.S. No one contracting grain wants a farmer to plant something that doesn't meet the standard, since that would be an exercise in futility. Another AC21 member expressed the view that additional material on seed should be found in the main report, and this document should be kept as a concise reference for farmers.

An AC21 member expressed support for the 2 paragraphs on seed in the draft Guidance document and noted that the additional information in the "Complex Issues" material provides additional context that is more philosophical rather than actionable. Consequently, definitive answers are not provided for producers. She wondered whether the Guidance document should state the obvious, namely that a farmer will never produce a crop with a lower percentage content of GE material than was found in the starting seed. Two AC21 members expressed the view that the existing 2 paragraphs are sufficient.

There followed discussion of whether the term "appropriate characteristics" used to describe starting seed that farmers would choose was adequately descriptive. There were suggestions to clarify with

words such as “maximum thresholds” or replacing “characteristics” with “purity, quality, and traits.” There was no consensus on how to address the concern, and Dr. Schechtman asked the committee to keep thinking about this question.

VI. Remarks from AC21 Chair Russell Redding

Secretary Redding then arrived and was welcomed at the plenary session. Dr. Schechtman provided a brief summary of the morning’s proceedings and asked Secretary Redding for his thoughts. Secretary Redding thanked AC21 members for their continued engagement and good work. He noted the considerable work that has been done and the foundation for the plenary session that had been provided by the work of the three subgroups. He noted that the themes of the future of agriculture, infrastructure, and key relationships with the consumer had arisen during a morning conversation he had had with the Governor of Pennsylvania, themes that are clearly relevant in the coexistence conversation.

He observed that the tasks in this meeting come down to two points: what guidance we give stakeholders and how to convene/facilitate discussions of coexistence. He recognized that only one more meeting is planned and the AC21 is therefore in its final stages: the current meeting will set the framework for drafting. He observed that it is critical to take what the committee learned in its previous efforts and commit to the final deliverables. He acknowledged the difficulty of the issues before the committee, but expressed gratitude that Secretary Vilsack had the vision to charge this committee with examining them. The challenge is how, at the landscape level, to facilitate the relevant type of discussion. He expressed confidence that the final work product, like the earlier AC21 report, will have great value.

Secretary Redding acknowledged that the earlier report had reached its conclusion through compromise. He reinforced the need to work through the differences of opinion and look at what can be done do to provide guidance for the benefit of producers and also point to directions for future AC21 work agendas. He closed his remarks by thanking committee members for staying in the conversation in a professional way.

VII. Initial Discussion of a Draft Model for Local Coexistence Conversations

Dr. Schechtman introduced the draft document by noting that it attempts to incorporate the most significant themes offered in the plenary session as well as the work of the subgroups. He noted that there had earlier been agreement that the report should include a document for local communities to help initiate farmer-to-farmer discussions around coexistence and that, in order to bring everyone to the table, local conversations would have to go beyond the issue of pollen movement. The document was not intended to be prescriptive or provide specific solutions, but to bring people to the table and to allow participants to raise issues and to discuss how to work them out among themselves or within communities.

He indicated that the Models subgroup had met and discussed the draft offered by Commissioner Goehring, based on his state's pollinator plan. The group felt that the draft, while helpful, did not discuss pollen drift in enough detail and did not provide enough discussion on the roles and responsibilities of conveners. The Chair and Dr. Schechtman offered to attempt a re-draft that addresses these concerns. He noted that the draft was an attempt to walk some delicate lines: the choice between focusing on gene flow versus focusing on such broad farm management themes that the gene flow issue becomes buried, and the choice between elaborating farm management strategies or just leaving topics to local actors to decide what works best in their communities. He asked members for their views as to whether the draft hit the mark, or had errors or omissions.

Several members expressed support for the document. A couple of initial suggestions were made by members: that, in places in the document where reference is made to protection of U.S. land resources, the text should refer to protection of U.S. "land and water" resources; that, for context, there needs to be a lead-in paragraph to the discussion topics section to explain that the topics represent the range of issues that growers are managing in their operations; and that the document should note that local conditions will vary and could impact production practices relative to coexistence.

One AC21 member suggested that the document should take note of the experiences in Oregon, where local conversations have come close to a boiling point, and that the committee should recognize that strong opinions arise, and that delegating conversations to lower levels of government may not resolve them. Another AC21 member expressed concern, not about farmers working together, but about other local entities who want to take complete control of food systems, individuals who want to ban the production of GE crops entirely. He noted that some ballot initiatives would give local entities complete autonomy over businesses and corporate entities, and several would actually ban farming by corporations, which effectively ban family/small farms who are incorporated. In his view, such initiatives ignore interstate commerce and have frightening implications. He expressed the view that the discussions being called for need to be between farmers and not involve non-farmers who want to tell people how to farm. The previous speaker noted the seizure of the Oregon wildlife refuge as an example of what happens when issues are not dealt with in a responsive way at the Federal or State level. He noted that Oregon has a huge spectrum of political leanings, and expecting local processes to bridge that divide may not be feasible. He observed that even in intense situations, when it gets down to farmers, they can generally work things out. However, he expressed skepticism that letting local entities work things out will in the end achieve solutions.

An AC21 member expressed approval for the document and suggested that the document should not switch terminology back and forth between "farmers" and "producers." She also suggested that a summary paragraph at the end would be useful. Another AC21 member offered the view that the draft was substantive, strikes the right balance, and presents issues that all farmers care about. She supported the addition of context to explain why topics are being discussed. She suggested that the document should indicate that its intent is to bring people together and allow farmers to have local conversations rather than to take away opportunities.

An AC21 member noted her appreciation for improvements over the document that had been considered by the subgroup. She noted that in the Convening Discussions section it might be helpful to suggest that participants who are considering participation in conservation programs factor in neighboring activities and think about overlaps, not just in soil and water conservation, but also in incentives for enrollment in buffer strips, to make the connections to practices that facilitate coexistence. An overarching discussion could pull this idea together. Another AC21 member agreed that such a statement would provide some context for why the various resource conservation strategies are listed as discussion topics.

Other members supported the ideas of adding a statement for context and adding a closing statement. Another AC21 member requested additional specificity on how meetings would be hosted and funded, particularly with reference to available funding, such as through USDA's Sustainable Agriculture Research & Extension (SARE) program. Dr. Schechtman noted that the topic of SARE funding had been brought up in subgroup discussions, but had not been included in the draft because he had not yet researched grant funding availability for this purpose. Further information would be required. An AC21 member suggested that USDA might signal that the convening of such meetings would be a funding priority, where it wouldn't conflict with the funding authority. Several specific wording changes were suggested by members relating to challenges versus opportunities, the description of management decisions, and the use of crop rotations.

A suggestion was made to rearrange the paragraphs in the Introduction, moving paragraph 5 right to the top. Secretary Redding noted that that rearrangement would help to clarify that the document is focused on farmers. He noted the concern raised earlier about the involvement of other local non-farmers in local discussions. An AC21 member suggested that a sentence be added indicating that farmer-to-farmer dialogue needs to take place at the local level, while also recognizing the importance of national standards, to ensure that conversations about commerce and trade don't limit those at the local level. She also noted that in the section on Considerations for IP production, Including Seed Production, the two roles for seed, as an IP product and as the starting material for other crops, need to be distinguished.

An AC21 member requested that the draft acknowledge that there will be instances where issues surrounding biotech get very heated and note that in cases where there is a local or region-specific issue, an extra level of care needs to be invested in designing or organizing local meetings. He raised the recent example of issues surrounding the occurrence of GE bentgrass in local communities who don't know how to deal with it--a localized, specialized issue that has raised serious local concerns. He offered the view that USDA needs to put more attention and energy into trying to resolve certain issues at the federal level. He added that feelings, misinformation, and passions engendered by State ballot initiatives have made it more difficult to find Federal solutions to biotech policy. Another AC21 member offered the view that the document should not go into such detail. He expressed a caution that the document should not appear to be a statement about activism, but instead should be a basic workbook, and should include a statement affirming that farmers are best situated to deal with the issues that they have.

Secretary Redding inquired about agriculture's voice in the contentious Oregon discussions and whether part of the problem was not having an agricultural voice in the discussions. An AC21 member noted in response that groups other than farmers engaged at every local meeting, while farmers were busy farming and not present to speak for themselves. Over time, industry and organizations that support the industry have engaged more in local discussions. He expressed the view that farmers can no longer just farm but must engage in such discussions. Secretary Redding asked the committee to consider lessons learned from Oregon in the framing of this document and the need for engagement and resolution. He advised members that if something is missing or needs to be amplified in the current draft, it should be discussed. An AC21 member suggested that the document should clearly indicate that in such discussions, farmers need to be engaged from the start, and the discussion needs to be driven by farmers, dealing with their customer base.

Another AC21 member expressed the view that the idea that conversations about coexistence should only happen between farmers is what has gotten agriculture to where it is today. Instead, she argued, consumers, who want to know what is in their food, how it is produced, cannot be ignored. Consumers feel disconnected and the only way they feel that they can have control is by passing ordinances like the one in Jackson County, Oregon. She suggested that consumers need to be at the table in discussions.

Secretary Redding observed that the objective for this effort is to engage the agricultural community to get involved in local conversations, noting the hesitancy based on experiences in other parts of the country. He noted the importance of conveying information to the consumer on production practices and the need for a good knowledge base to explain why particular methods are used. He also noted the lack of publicly available information to defend certain farming practices. He stressed the importance of producers' explaining why certain practices have or have not been adopted and what it takes to make a living. Dr. Schechtman added that the discussion about Oregon points to the range of circumstances in which this document may be used. Coexistence discussions were first framed in the context of talking about opportunities available to farmers who want to diversify. In some locations, conversations will be very positive. But in other locations, the conversations will be much more fraught and will have to have a different focus. The document may therefore need to clarify that not all conversations will have the same broad set of topics, depending on the locality. On the topic of consumer involvement, he noted that the document was drafted with the intent of promoting farmer-to-farmer dialogue in a facilitated manner. He recognized that the issue of consumer expectations and involvement is a very important issue for the future of agriculture. He suggested that discussion of it may not go in the Models segment, but might be highlighted in the "complex issues" section.

An AC21 member observed that one portion of the final report, identified in the notional outline, is to discuss challenges for coexistence now and into the future and directly reference the changing expectations of consumers. She noted that the core documents of the report are intended as resources for growers, while the overall report can consider a broader set of issues as part of the overall context. Two other AC21 members agreed that the issue of consumer engagement and future dialogues with consumers needs to be addressed somewhere in the overall report. A discussion of farm practices and impacts on neighbors is still best suited to farmer-to-farmer discussion. The Models document,

however, can provide some overview of what farmers are currently doing to a wider audience and perhaps provide a starting place for larger discussions.

An AC21 member supported keeping the emphasis in the Models document on farmer-to-farmer dialogue and suggested that it might bring about progress in most areas. He noted, however, the changing impression and attitudes of the public about the U.S. food system, which was formerly conveyed by the face of the American farmer but is increasingly being defined by large corporations and other entities in agriculture. He suggested that the original charge and scope for this effort may have been too narrow. He suggested that the notional outline incorporate recognition of the changing social and political landscape surrounding coexistence. He offered the view that many tensions could have been avoided with better policy decisions in the early days, and that recognizing that there is work that remains to be done, beyond that at the farmer-to-farmer/local level, would be a good addition to the overall report.

VIII. Initial Discussion of Draft Outline for the Overall AC21 Report

[NOTE: The following discussion occurred in two pieces, interrupted by the public comment period. It is reported here in one segment for clarity.]

Dr. Schechtman offered introductory remarks about the notional outline for the final report. He indicated that the draft document was loosely called an outline, but was more accurately a list of elements to be included in the final report and a rough order. The outline was drafted prior to putting together a first draft of the “complex issues” section and does not cover the two stand-alone pieces, since they are already drafted. He indicated that the outline is intended as a thought piece and input on it is sought. How the two stand-alone documents are included and what actions will be recommended by the committee are topics for discussion. He requested information on the flow of the outline, whether items need to be added or deleted, and whether elements need to be rearranged. He noted that he had already heard some relevant comments in the course of the day’s discussions.

An AC21 member noted that the outline covers a lot of material. She suggested that the sections on report preparation and on what the report will do be shifted to the end to de-emphasize them. Another member suggested that it would be important to frame what the report does and does not do. She noted how the previous report provided up-front framing of issues and substance. She indicated that the relationship of the stand-alone portions to the full report needed to be considered, and how that would affect the framing.

An AC21 member noted his expectation that the Secretary would provide a foreword which sets the stage and the report would also include an executive summary. He expressed his preference for a short, substantive, interesting report which would get right to the substantive recommendations up front and also incorporate short case studies summarizing experiences over the last five years. He suggested that contrasting those experiences with expectations USDA had had would indicate whether new recommendations are likely to have more of an impact than past ones. Another AC21 member

suggested that the report should emphasize the two core elements of solutions at a local level—the two stand-alone documents—and communicate the context immediately, e.g., with the statement that coexistence considerations can apply on an individual farm and not just between neighbors. She raised the question of where the seed issues fit and how they can be presented in a way consistent with other documents.

An AC21 member suggested that, presuming consensus on the report is reached, some subset of the report would be sent out to State and local communities and to USDA field agents based on the recommendations of AC21 and might roll in some of the other committee recommendations for the Secretary. Such recommendations might address how USDA could endorse, support, or encourage the suggested activities. She wondered whether other AC21 members shared this concept. Dr. Schechtman noted that this comment raised important unresolved issues. He observed that the report as configured thus far does not include any recommendations. He added that it was his presumption that the committee would recommend that USDA take some actions with two stand-alone documents, but exactly what those actions would be had not yet been discussed. He asked the committee whether there would be additional recommendations within the charge. He added that he did not expect that the report itself would include a foreword from the Secretary. The committee, however, may recommend that the Secretary include a foreword on communication that goes out to other parties with pieces of this report. Secretary Redding observed that the previous report contained good framing of the issues, which should be carried forward in the current document. He suggested that some of the themes and principles articulated in that report would be central to this report as well and would provide context.

An AC21 member suggested that the title of the last major section be changed from “Coexistence is an Ongoing Process ...” to “The Evolving Complexity of Coexistence.” He noted that such a title would encompass the pieces already contained in the outline and would expand the scope of the section in a good way. Another AC21 member suggested that the section “Coexistence – Why It’s Important” should be kept first, be kept concise, and include quotes from Secretary Vilsack in the introduction. He also suggested that: the previous work of AC21 also needs to be discussed up front; the section on process should be kept very short; and a statement recognizing the two stand-alone documents should be added. Another AC21 member expressed the view that the 2 stand-alone documents, which are the bulk of committee’s contribution, should not be relegated to annexes or presented as afterthoughts. She cautioned against including so much context that the main points are lost.

An AC21 member suggested folding in the sections on seed issues and functional traits into the re-titled section, “The Evolving Complexity of Coexistence.” Another AC21 member voiced support for this suggestion and noted that such a section could provide a home for discussion of the implications of topics like gene editing and other new breeding technologies. Dr. Schechtman attempted to recapitulate the order discussed:

- Section 1, Coexistence-Why It's Important;
- Previous Work by the AC21 on Coexistence;

- The Evolving Complexity of Coexistence (what used to be called Coexistence Is an Ongoing Process but Is Not New);
- What This Report Will Do (setting up the two documents as being the core piece of the report);
- The two stand-alone documents (Guidance document and Models for Local Discussions document);
- Recommendations as to what the Secretary should do with the documents,
- Challenges for Coexistence Now and Into the Future; and
- An appendix on how this report was developed.

An AC21 member observed that little time remains before the September meeting and inquired when the committee might see a draft of the report. He noted that a number of issues could arise when members finally see the draft. Dr. Schechtman noted that the draft timeline would target a full draft report by late August, with a number of the subcomponents provided before then. He added that revised versions of the portions of the report already discussed at this meeting would be shared considerably earlier.

An AC21 member noted that in the arena of coexistence there are not merely challenges, but also opportunities. Another AC21 member expressed concern about the use of negative terms like “complexities” and “challenges.” She suggested that it would be good to think overnight about how to reframe the headers that currently use those terms, and wondered if the current discussion should focus on order and substance. Dr. Schechtman replied that in his view such suggestions about framing were appropriate. He expressed the view that, based on the discussions, there are both challenges and opportunities. It would be tough to claim that there are no challenges, but there is a need to frame the discussion positively to focus on opportunities for farmers. Another AC21 member agreed with the idea of positive framing, but suggested that there needs to be a sense of urgency in moving forward with recommendations imparted as well.

Dr. Schechtman distributed a proposed timeline, up for discussion, for completion of the committee’s report. On the proposed timeline, the draft elements that have been discussed in detail at this meeting-- the Guidance document, the Models document and the “Complex Issues” text—would be revised and provided to members by July 1. Then the full draft report would be provided to members by August 25. He indicated that the time gap was there in part to accommodate a potential meeting of the Models subgroup, because at the last plenary session there had been discussion about the Models subgroup taking a role in assembling the final report. He asked whether the Models subgroup would need to be involved, or could the date for delivery of the full draft to the committee be moved up 10 days.

An AC21 member offered the view that the Models subgroup did not need to work on the assembly of the pieces of the report and that the individual pieces need to be put together to resolve inconsistencies. Another AC21 member offered the view that Dr. Schechtman and Secretary Redding should draft and assemble the report, and then circulate it to the full committee.

An AC21 member suggested that the portions of the report already reviewed by the AC21 should be revised immediately and gotten to the full committee very quickly. He suggested that the full report would not need to repeat elsewhere material found in the stand-alone segments. He suggested that the timeline for getting a first full draft of the report to members be moved up to allow time for comments and potential redrafting prior to the next meeting. He offered the view that the current timeline does not allow enough space for back and forth. Another AC21 member expressed satisfaction with the proposed timeline and was okay with having the first discussion of the full report at the upcoming plenary session on September 8. Another AC21 member indicated that she did not believe that another subgroup meeting was necessary, but also supported an earlier deadline for committee receipt of a full report draft.

Dr. Schechtman indicated that he could move up the scheduled deadline for circulating a complete draft of the full report to August 10. There would be time for members who wished to submit comments, but there would not be a formal request for comments before the September plenary session. However, an attempt would be made to accommodate big-picture comments submitted. Secretary Redding concurred and noted that it will be a challenge to work quickly to meet the new timeline.

An AC21 member requested that a revised outline of the report be prepared for the committee's review. Dr. Schechtman agreed to provide a revised version by the following morning. He also noted that he would still need input from the committee on recommendations as to what USDA should do with the stand-alone documents.

In response to a question about the future of the AC21, Dr. Schechtman noted that it was his intent to submit the committee's Charter for renewal, and as a discretionary committee, it would be up to an incoming Secretary of Agriculture to decide whether the AC21 would continue. If so, the committee would need to be repopulated; most current members will have hit their term limits, so there would be almost all new members to repopulate the committee. Many other issues would likely need to be addressed by an incoming Administration before a decision on discretionary committees like this one might be made. There will be briefing materials about the AC21 in the package of transition documents from senior staff to help to inform the incoming appointees. Mr. McKalip added that as a matter of policy, it would be this Administration's intention to ensure that all of the work of AC21 is well-summarized for whoever comes in in January and that they understand the complexities of the coexistence issues and how AC21 has contributed up to this point. Secretary Redding added that USDA's work implementing the recommendations in the AC21's earlier report should not be skipped over in the final report.

An AC21 member inquired why the Secretary is determined to issue the report immediately before the election. He suggested that there might be advantages to waiting until after the election, understanding the likelihood of continuity versus disruption. Mr. McKalip replied that the schedule was designed to get ahead of the lame duck process, and to ensure that the "campsite was clean" at the end of the Administration, and to make sure that the committee's excellent recommendations are appropriately put into the policy process.

Secretary Redding noted that the committee would revisit the outline the following day. He asked committee members to think about flow and content of the document and how to capture work of the AC21 over the years and think about the proposed timeline overnight. He also asked that the draft “complex issues” document be reviewed and asked members to consider whether it has the needed components, or is missing something.

IX. Public comments

[NOTE: The full text of these public comments are available on the AC21’s web page.]

There was one comment from a member of the public during the comment period, from Drew Toher, from the organization Beyond Pesticides. He described his organization as a grassroots organization founded in 1951, focused on reducing pesticide exposure. He expressed appreciation for USDA’s work and the opportunity to provide input and his expectation that the outcome of this work will result in substantial advancement. In his view, the underlying goal must be equity and respect, including between neighbors with disparate approaches to crop production. He called for a community-based approach facilitated by USDA that includes education and collaborative action. He suggested that outcomes must be evaluated and measured in terms of impact to non-GE farmers. He recommended the use of social media to foster dialogue.

He indicated that contamination and drift are important issues for organic farmers, as shown by a survey from Food and Water Watch and the Organic Farmers’ Agency for Relationship Marketing, and that the burden of drift prevention falls on organic farmers. In his organization’s view, the AC21 must ensure that GE producers assume responsibility for the movement of pollen: the charge requires AC21 to create ways to convince GE farmers to modify practices. He indicated his belief that USDA has statutory authority to require the creation of buffer zones where there is risk to organic crops. AC21 should recognize that GE crop producers are also damaged by the overuse of pesticides. He urged AC21 to advocate for farmers and be given full information on pollen drift, resistance problems, and ecosystem effects of GE crops so that they can take measures to ensure that they and their non-GE crop neighbors are protected. He noted a recent GAO report showing that USDA had limited data on the unintentional mixing of GE and non-GE crops and urged USDA to collect additional data on the economic costs of “genetic drift” (sic). He offered the view that responsibility for such drift should be placed on the user of the technology, not the organic or IP producer.

End of Day One.

X. Welcome and Reflections on Day I

Secretary Redding again thanked the committee for its work and remarked that the work to wrap up the response to the Secretary's charge is in the final stretch. He noted that there had been a good discussion on the Guidance document and that most AC21 members seem comfortable with the two draft stand-alone documents. He indicated that the committee would need to revisit the revised outline (revised overnight and distributed that morning by Dr. Schechtman), particularly the part dealing with the introduction, and ensure that it makes clear to the farm community the purpose of the report and the stand-alone documents. Also there is a need to clarify the committee's recommendations to the Secretary. There is a need to make sure that the report is advancing the conversations on coexistence and agriculture. He reiterated themes from the 2012 report of the positive future for production agriculture in America and the need to advance coexistence and raise awareness of the importance of respect for diverse production systems. He noted that there is a need to build the confidence of farm community to respond to coexistence challenges, engaging in dialogue with both neighbors and consumers. He reiterated the point of agreement that farmers are the most credible source to talk about production methods and why they've been adopted.

Dr. Schechtman then indicated that there were two new documents for members: the revised notional outline for the report and a document requested for distribution the previous day. The genesis of the second of these documents was as follows: at the same time that EPA announced its policy to address herbicide-resistant weeds in 2015, USDA announced a series of complementary steps that the Department was taking in the press release provided. He then provided a brief recap of Day I of the meeting. He noted that in the Guidance draft document, there are questions that remain about the discussion about seeds, and particularly around whether there is a need to explain the term "characteristics." With respect to the Local Coexistence Models draft, some rearrangements had been suggested, as well as small modifications, but AC21 members were overall fairly comfortable with the document. The notional outline has also been rearranged per member feedback. What remains is to discuss the "complex issues" draft, to come up with recommendations, and to revisit the timeline.

Several AC21 members expressed satisfaction with the draft documents already discussed, suggesting either that big-picture issues be focused upon or that the report be kept concise and focused, without attempting to address all possible topics. Two members expressed concern about the detail or fit of the "complex issues" draft document, and the possibility that the report would lose its focus going over issues that had already been discussed in the previous report. A suggestion was made that the "complex issues" material was not needed in the final report.

An AC21 member suggested that the AC21 devote some time on potential recommendations to the Secretary, with an additional reconsideration of the two core documents to confirm that the drafters have a clear understanding of committee modifications. With respect to the "complex issues" document, she noted that it would not be part of either outreach document to farmers, but that in the full report it could help to forge consensus within AC21 by articulating the thoughts of the committee and enabling members to feel that their issues have been included. Another AC21 member disagreed, noting that the intended deliverables would be the documents for local communities. He suggested

that the “complex issues” document has a disproportionate focus on challenges and opportunities in biotechnology.

XI. Discussion of Possible Recommendations to the Secretary

Secretary Redding suggested that the committee develop a short list of recommendations and then use that list in considering the outline and the final report.

An AC21 member suggested that USDA be strongly encouraged to mainstream the use of the two new tools (the stand-alone documents) within diverse programs that reach out to different constituencies. She noted a consistent theme that even if USDA funds are not set aside for coexistence, there are a lot of very strong programs within the Department that should be aware of these tools and encouraged to make them available and applied where appropriate. She specifically cited Farm Service Agency- (FSA) and Natural Resource Conservation Service- (NRCS) run programs that might incorporate these as part of their overall agendas.

An AC21 member suggested 5 recommendations to USDA: 1) dissemination of tools broadly throughout USDA, and consideration of the use of the FSA “organic champion” model (having self-selected point persons with natural interest to facilitate the efforts); 2) official endorsement from the Secretary’s office of the value of convening local coexistence discussions; 3) that USDA collate a list of available funds that might be used for convening local discussions, building the idea into requests for proposals for appropriate programs; 4) building in an evaluation of the resulting effects, to determine whether USDA’s efforts result in meetings being convened; and 5) some kind of advice to USDA on how to build bridges from USDA to State Departments of Agriculture on this issue. With respect to the last recommendation, Secretary Redding noted that the National Association of State Departments of Agriculture (NASDA) has expressed interest in partnering in the recommended local discussions and has raised the subject at its meetings.

Ms. Rakola elaborated on the FSA organic “champion” concept. It is modeled on special emphasis program management in the Civil Rights for historically underserved communities arena, where it is a voluntary, collateral duty (with a defined percentage of work time) dedicated to serving a specific population. In that arena, States have local control to define specific roles, staff self-nominate, and the program takes advantage of existing knowledge and interests.

An AC21 member asserted that FSA is actively discriminating against white American farmers farming small acreages and voiding contracts with them. Mr. McKalip responded that he would look into the situation immediately.

[The following is a summary of a response from Mr. McKalip to this assertion which was made in the closing section of the meeting after facts were gathered, but which is included here for clarity.]

Mr. McKalip indicated that USDA takes discrimination very seriously. FSA has no policy or rule on the topic of exclusions for white male farmers. However, the 2014 Farm Bill included language from

Congress on Agricultural Risk Coverage- Price Loss Coverage (ARC-PLC) stating that the sum of base acres on a farm must exceed 10 acres in order to participate, since they were concerned about administrative costs involved in program enrollment and felt that for small acreages costs could outweigh benefits. This provision does not affect loan, NRCS, or Rural Development programs, only counter-cyclical price programs. At the same time, Congress also included language in the Bill for limited-resource producers, under which they can get coverage at any size operation. But this is not a USDA policy of discrimination. It is important for USDA to address any claims of discrimination and provide the facts.]

An AC21 member suggested that a recommendation be made to USDA that it post the two stand-alone tools on its website and make them easy to find apart from the larger report. Also there should be a recommendation that the Secretary reach out to different trade associations, grower groups, seed associations, etc., to broadly disseminate these tools as well.

An AC21 member noted his agreement with the previous suggestion and observed that the next Secretary of Agriculture may not have the time or “bandwidth” to implement the AC21’s recommendations and that accordingly the efforts of Secretary Vilsack after receiving this report would be of great importance. He suggested that an AC21 recommendation should address how the USDA should engage with State Departments of Agriculture in order to use them as a channel of outreach and access for the two documents and that in addition, there should be a recommendation to Secretary Vilsack about engaging systematically with commodity groups and grower groups and NGOs and other private players to inform them as to how they can use the resources within their networks so that the information can filter down to the local level.

Dr. Schechtman commented on the lifespan of advisory committee reports. He noted that after reports are completed, recommendations are tracked under FACA, and agency efforts and success in implementing recommendations are reported to the General Accounting Office and to Congress. He observed that while a new Administration may initially not have “old” recommendations on its priority list, an advisory committee report doesn’t vanish. Secretary Redding expressed the view that whatever is produced must transcend Administrations and advance the conversation on coexistence, a topic central to agriculture. He noted that the background and context in the AC21’s 2012 report highlighted that all participants in agriculture have a role in making coexistence work. He suggested that there was a need to go beyond mere dissemination of the two documents, and think about who in each of our own organizations could help USDA and the AC21 keep this conversation alive.

An AC21 member suggested that the quote from Secretary Vilsack contained in the opening paragraph of the Guidance document draft would be suitable for framing and hanging in the USDA patio. He suggested that it would be appropriate for people who visit USDA to see the quote. Another AC21 member noted the contrast between the current report under discussion and the committee’s 2012 report in terms of vision and substance, and wondered how best to discuss the previous work and its recommendations in the new report, by restatement or by reference.

An AC21 member suggested that there be a recommendation that USDA use communications

technology, such as social media and webinars, for dissemination of the tools. She wondered about the process by which a report of this type would be disseminated within USDA and result in particular actions by USDA employees. Mr. McKalip replied by noting that policy discussions with Agencies about program priorities, resources, and field staff come from policy documents like this. He noted the example of a biogas road map that USDA had put together, which placed additional emphasis on funding anaerobic digesters for dairies for the purposes of greenhouse gas sequestration. He also noted that years earlier, concerns over field prices helped drive how USDA marketed conservation tillage at the local level. In that instance it wasn't so much that anything changed in the program priorities, but the word clearly got out to field staff that a good way to communicate about the use of conservation tillage to a farmer is with the message, "fewer passes across the field, thereby less usage of diesel or traditional petrol." Dr. Schechtman observed that the two stand-alone documents include very limited roles for USDA. The major roles would seem to be disseminating information to people who will use it, demonstrating support in ways the committee recommends, providing a clearer sense of potential financing, but not having USDA take a leading role in local processes. USDA will need to think creatively about how to bring information to local communities without seeking to run the local processes that may result.

Ms. Rakola requested additional clarification about the roles for USDA recommended by the committee. She noted that discussion at the previous plenary session implied that a USDA/federal effort would be poorly received on a local level, but subgroup documents suggested roles for USDA's State or local offices. Mr. McKalip noted that this effort is focused on State and local efforts on coexistence, but there is a role for USDA to help facilitate, trigger, and provide resources for those discussions. The recommendations the committee offers could help USDA figure out the best ways to do that, whether it be directives or work with our county-based agencies to find dollars or meeting space, or other approaches that you identify to help those discussions take place. An AC21 member suggested that there is a need to strike a balance between creating a headquarters-driven initiative versus a delegation to the local level. USDA should identify this as a priority area, but leave discretion to the local level about how to use these tools and also develop some kind of evaluation or check point to see if tools are being used. USDA would not have to convene meetings, but could talk to constituents and highlight available resources.

Secretary Redding noted that he had looked back at recommendations II and III in the 2012 AC21 report, which discuss outreach and voluntary strategies. Recommendation II called for USDA to spearhead and fund a broad-based, comprehensive education outreach initiative to strengthen understanding of coexistence between diverse agricultural production systems. Recommendation III related to the involvement of Land Grant institutions, Cooperative Extension and other USDA Agencies. He observed that, in keeping with those earlier recommendations, the committee is now defining one appropriate role for USDA, and that those earlier recommendations can help frame this report.

An AC21 member suggested that she would not want USDA in the "driver's seat," but rather having a role in making resources available at the State or local level. The report should be clear about a leadership role for USDA—having the "megaphone" or serving a catalytic role. Another AC21 member

suggested that the primary use of the information the documents will provide won't be at meetings, but rather by individual farmers considering organic or IP production. USDA's charge will be getting the documents to field staff and making them aware of their existence. In his view, the starting point for local work on coexistence will not be multiple meetings throughout the countryside, but instead individual producer considerations. Another AC21 member recommended that the report include Land Grant and Extension faculty as neutral local discussion conveners. Another AC21 member observed that many new coexistence challenges will arise within an individual operation, if it is diversifying into new markets. He suggested that a special section might be added on issues and challenges within an operation and tools that might be used by farm managers during a production method transition.

An AC21 member agreed with the earlier observation that individual farmers would be the ones who would use the tools provided. He noted that he regularly visits his FSA County office and only saw the word "organic" in a county office last year for the first time, but that having the word on a document there put the topic into farmers' minds. He observed that placing information in County offices can alert farmers to opportunities and resources and he also indicated that he sees a role for basic fact sheets on emerging markets, rules, and coexistence issues. Another AC21 member agreed about the importance of local FSA offices. He suggested that assessing an IP opportunity requiring a coexistence plan would involve a visit to an FSA office and a review of mapped farm acres to start to gain information and understand potential impacts on eligibility. He suggested that FSA field offices be notified of the availability of the two stand-alone documents. He also disagreed with the earlier comment about new issues arising when a producer diversifies to serve new markets. In his view the issues would be the same whether addressing on-farm issues, or issues with neighbors. Secretary Redding inquired whether dissemination should also be to other field offices such as those for NRCS, as well. The reply indicated that all USDA field offices, and soil and water conservation offices as well, should be targeted. There followed some additional discussion of different programs that might be available to producers who transition to produce for new markets and the challenges of adapting to them and understanding the new marketplace risks as a reason for including a new section in the report. An AC21 member indicated that he remained unconvinced that there were different implications vis-à-vis coexistence that would justify its inclusion. Another AC21 member concurred that there was no need to distinguish between considerations for individual operators versus considerations that apply in consideration of neighbors.

An AC21 member noted that the current discussions are important and progress has been made, but work remains in order for everyone to be comfortable with the final report. She observed that the models subgroup had not previously considered the information presented as applicable to individual farms, and if so applicable the focus would change from conflict resolution to choices more broadly. She suggested that there could be a simple statement added to the effect that the tools are applicable between neighbors and to an individual farmer's choices, consistent with the AC21's embracing of diversity in agriculture. Another AC21 member agreed with that suggestion and also inquired as to whether the special emphasis tool might be applied more broadly than for organic agriculture, to accommodate diversity in agriculture more broadly. Ms. Rakola noted that special emphasis program managers have been utilized to help address Civil Rights and Equal Employment Opportunity responsibilities, but it is a question whether it provides a tool that can be used for more topical areas,

and the topic is worth a conversation with the leadership at our field agencies.

An AC21 member suggested that there could be a recommendation for the National Organic Program (NOP) to develop instructions or guidance for farmers on how to address coexistence within the Organic System Plans, which are created annually. The guidance could apply to land that farmers manage as well as neighboring lands. Another AC21 member spoke against the idea of increasing the workload of current organic champions. She noted that there is already a great need for services for the organic sector and the role of those champions should be to help organic producers access USDA programs and services. She added that looking forward, there is a need to make sure that the emphasis is on reaching out to all producers, not just those producing organic or IP and trying to encourage the relevant conversations. Another AC21 member noted that the National Organic Standards Board (NOSB) had previously recommended that USDA issue the previously called-for guidance and that the NOP had already issued guidance on minimizing contamination within organic products.

An AC21 member observed that having the Secretary place an emphasis on diversity is always welcome. He suggested that the report should start by thanking all farmers for what they do, providing choices for the rest of America.

An AC21 member inquired whether there is a place where farmers register their choice to grow GE crops or sign contracts, at which encouragement could be offered to engage in joint coexistence plans with neighbors. Another AC21 member replied that GE contracts already have lengthy sections on coexistence. Moreover, for IP or value-added crops, there are specific requirements, including talking to managers of bordering fields to determine what will be grown and therefore what buffer zones, if any, may be required, in contracts. Another AC21 member followed up to ask whether the point of signing of a GE contract would be an opportunity to provide information on coexistence. Another AC21 member suggested that contracting buyers or grain elevators could also be encouraged to provide tear sheets on coexistence. An AC21 member summed up this discussion by saying that there might be a recommendation that USDA conduct outreach to technology providers and to the commercial entities that interact with farmers growing GE crops and encourage them to reference the tools the committee has produced.

XII. Discussion of the Revised Outline for the Report and Discussion of the “Complex Issues” Draft

An AC21 member voiced support for the revised outline but wondered, with respect to the elements “The Evolving Complexity of Coexistence” and “Challenges/Opportunities Now and Into the Future,” whether they fit within the current charge from the Secretary and whether additional information on those topics actually needs to be included in this report. Another AC21 member suggested that the “complex issues” draft (essentially the “Challenges/Opportunities Now and Into the Future” material) repeats issues that are already brought out in other documents, including the draft Guidance document. He suggested that the topics contained therein could be incorporated into the other documents and that the whole section, which may go beyond the charge of the committee, could be done away with.

An AC21 member expressed puzzlement at the resistance to inclusion of text on the “complex issues.” She suggested that the material might need revisions, but expressed disappointment that issues considered important by several members were, in her view, being disregarded. Another AC21 member expressed support for including mention of these controversial and complex issues at the proposed locations in the text according to the revised outline. She noted that there was not AC21 agreement on any steps to be taken to address the cited “complexity.” She also noted her sense that seed issues were perhaps overemphasized, noting that the earlier AC21 report discussed a broader range of potential sources of unintended GE presence. She suggested that the degree of emphasis on the single issue might be excluding other sources which are equally important, such as gene flow.

Dr. Schechtman reflected on the origin of the “complex issues” draft. He noted that it emerged as a result of discussions at prior AC21 plenaries, where there was considerable comment by several committee members about the need to discuss these topics at some length, and also sentiment that the discussion did not belong in the stand-alone documents. He suggested that details, content, and amount of emphasis could be topics for the committee to discuss. Another AC21 member suggested that these materials did not belong in the final document. Another AC21 member disagreed, arguing that the complex issues represent a part of work the Secretary requested, coming together as representatives of diverse elements of American agriculture to discuss these topics in a non-confrontational way. She suggested that the discussion of functional traits in the “complex issues” draft highlights the fact that the discussion cannot be framed as “organic vs. GMOs,” but that issues are arising from many directions. She further expressed the view that seed issues can’t be discussed too much. Some producers want seed with no GE material, and the choice that they want needs to be discussed. She indicated that she would accept a sentence noting that the committee discussed many different issues at AC21 that can’t be covered in the report, but noting these two critical ones—functional traits (as a bridge to concerns of a wide range of producers) and the major issue of seed. Another member clarified that she was not recommending eliminating discussion of the issues, but the emphasis on them seemed disproportionate. She wondered whether specific bullets could be excerpted and put into the stand-alone documents.

Another AC21 member supported including the “complex issues” discussion as provided for in the revised draft outline. She suggested that other issues might be added to strike a more appropriate balance. An AC21 member suggested that he did not want to de-emphasize issues, but rather keep the document focused and concise, and emphasize opportunities, not challenges.

An AC21 member reminded members of the first meeting under the current charge, where flexibility was agreed on – an agreement to bring issues into the document that are not central to coexistence, but relevant to all of agriculture. She noted that the “complex issues” discussion presents information that her constituents need to see in order to be able to buy in and participate in conversations. Another AC21 member acknowledged that members may need to see certain things in the final report in order to achieve consensus, as was the case previously. He indicated that he was not quite sure how best to address the functional traits issue, but that the seed issue might be further addressed within the Guidance document, citing text from the earlier AC21 report in which seed is mentioned as a critical component. He added that all producers want more information on seeds. He acknowledged that non-

GE is the fastest growing segment of agricultural production and cautioned about pointing out issues in a way that would discourage future producers from taking on new challenges.

Secretary Redding asked whether the “complex issues” topics might be folded into other areas of the report. He expressed the view that if the committee represents thought leaders on biotechnology and coexistence, there is a need for the committee to at least acknowledge that issues are out there, although exactly how that is done will be critical. He suggested that presenting these issues, the committee would seek to raise readers’ awareness, since they may not be cognizant of these topics as important, among unresolved issues.

An AC21 member noted that earlier, some members had indicated that the issues in question were inappropriate for inclusion in the Guidance document and in the Models for Local Conversations document as well. Therefore, they were pulled out into a “complex issues” section. Secretary Redding wondered whether they could be included within the Opportunities and Challenges section, if that still exists. An AC21 member indicated that she could accept inclusion of the issues, as long as they are not singled out as being more important than other issues—they might be listed along with other topics. She indicated that she was sensitive to the language in the current draft—in her view, it would be unbalanced without highlighting other issues from the Guidance document.

Dr. Schechtman noted that in drafting the text under discussion, he had focused on trying to capture all issues raised by committee members, as well as information others had put in an earlier draft of the Guidance document. He had attempted to include all material contributed, which resulted in a long document on complex issues. He observed that there may be a need to redraft the section with a somewhat “lighter touch” and noted that there appeared to be more disagreement on this issue than on any other recent discussion.

An AC21 member suggested that more consensus could be achieved if there were instead a very short section addressing challenges. Another AC21 member recommended that reference to GE canola issues in the Northwest be deleted. He described the decision taken with regard to that topic as contentious and divisive, a decision made by a legislature and not illustrative of coexistence or of farmers working together.

An AC21 member offered a possible way forward. She suggested that the first priority would be a redraft of the “The Evolving Complexity of Coexistence” and “Challenges/Opportunities Now and Into the Future” sections, allowing the committee time to review and discuss them. She observed that if indeed the issues need to be included, the devil will be in the details. She reiterated a concern about why other issues in agriculture are included when they are not specifically relevant to coexistence. She suggested that there may be a need for redrafting some of the Models for Local Conversations text to move some issues raised there into the to the “Challenges/Opportunities Now and Into the Future” section. She suggested that the way to resolve all these issues was not yet entirely clear. Another AC21 member suggested that discussion of the broader complexities adds credence to the work the committee has done. It would indicate that the complexities haven’t yet been addressed but are

evolving and would show that the report was well thought-out, regardless of consensus on issues. She suggested retaining the 2 sections. Another AC21 member suggested discussing the content of the report, describing what the report provides (through the stand-alone documents) for farmers that want to participate in an IP market, before turning to the complexities and challenges and providing that information in a single combined section. He noted that functional traits will become more important on the landscape as more products containing them are developed, and that they will present new challenges as well as new opportunities; he also noted that the committee's core work, the two stand-alone documents, will help address those issues. Conversations must occur amongst farmers, and these core documents provide a pathway to those conversations.

Dr. Schechtman observed that before the sections "Coexistence Is an Ongoing Process but Is Not New" and Challenges and Opportunities" were merged into "The Evolving Complexity of Coexistence," "Coexistence Is an Ongoing Process but Is Not New" had a more positive focus. Separating the two pieces again, the information in "Coexistence Is an Ongoing Process but Is Not New" could be placed before the main documents and the committee's recommendations. Then the other issues could be addressed after those pieces in a more concise way.

An AC21 member voiced support for the suggested approach. She reiterated, however, that the language will matter, and that the discussion of the "complex issues" would need to be considerably shorter than in the current version. She wondered about the need for a different word in place of "challenges." She also reiterated a theme from earlier discussions, that the aim of the documents was to incentivize farmers to come together to discuss topics that are important for all of agriculture and practical local issues that folks are dealing with on their farms. It would be a positive thing if one of those topics is coexistence. Another AC21 member offered the view that the issue of seed needs to be contained in all the documents, noting the impact that these documents will have not only on farmers, but also on those who specifically produce seed for sale. He noted that the committee's 2012 report had been read by those companies and it had had an impact on their efforts to produce pure seed. He suggested that the new documents would continue the conversation with those striving to provide additional choice in the seed marketplace.

Secretary Redding indicated that new content in the sections under discussion would be provided for review. He acknowledged that their placement in the report will be important. A goal will be attempting to forecast opportunities, look to the future, and highlight topics on the horizon--acknowledging unresolved issues. He offered the view that omitting the issues would not be a service to the Secretary or to agriculture.

An AC21 member suggested that, in reference to whether topics were "challenges" or not, the report might indicate that the AC21 believes that taking on its recommendations may help alleviate some of issues raised: that productive conversations among farmers about coexistence might help provide more transparency to consumer expectations, and help address other concerns that may appear in the future.

An AC21 member raised a process question as to when committee members will receive revised texts

for their review and whether any schedule adjustments are needed. She wondered whether any segments of the report might be distributed on a rolling basis. Dr. Schechtman replied that based on what he had heard, there might need to be a considerably larger amount of work done on what had been called “Complex Issues,” which will now be shorter and placed later in the report. Accordingly, he indicated that that section might arrive a few days later than originally suggested—no later than a few days past July 4—but that the full report draft would be circulated around August 10.

Secretary Redding suggested that it would be important for the report to include an inventory of actions taken by USDA in response to the committee’s earlier recommendations, noting the substantive changes made. In this way it would tell the larger story of coexistence work over the past 6 years. Dr. Schechtman asked whether the final report should list the work done by USDA to respond to the recommendations, provide an appendix, or simply acknowledge the actions. Secretary Redding indicated his view that the report should both acknowledge the efforts and point to a resource list. He noted that the revised outline would be considered a guide for the next drafting, with the modifications noted, and that a timeline had been agreed upon as was the case for the content of the stand-alone documents and the recommendations. He reminded members that the next time the committee meets, the content of the report will be in a fairly final form.

XIII. Closing Remarks and Adjournment

Mr. McKalip thanked Secretary Redding for all of his work guiding the committee through a very difficult and important process and thanked all committee members for their hard work. He noted that the Secretary is very aware and appreciative of the committee’s efforts.

Dr. Schechtman also thanked committee members for their hard work. He noted that some of the day’s discussions had been difficult, and observed that the implication is that the final report will be one that no one member would have written or will find ideal, but that that result would be in keeping with the charge from the Secretary. He reiterated that drafters would do their best to try to find that central point closest to consensus, based on the feedback they receive.

Secretary Redding observed that the conversation taking place is precisely the one USDA expected them to have and that the committee is offering a model for discussion and behavior and engagement. He noted the need to produce a product that will work as well in the San Joaquin Valley as it does in the Susquehanna Valley, 3,000 miles apart. He noted the need to find an equilibrium between the challenges and the opportunities and asked members to reflect on the two days of meetings to consider whether what has emerged will provide a blueprint for advancing the conversation on coexistence and meet their expectations. He wished members safe travels.

The meeting was then adjourned, around 12:10 pm.

