

The Maryland Pesticide Information and Reporting Workgroup
Draft Minutes
November 14, 2014

Workgroup Members Attending: The Honorable Steve Lafferty, The Honorable Roger Manno, The Honorable Joe Bartenfelder, Ruth Berlin, Dr. William Bowerman, Andy Fellows, Sherm Garrison, Carol Holko, Dr. Rick Kutz, Dr. Jed Miller, Doug Myers, The Honorable Charles Otto, Lindsey Dodd (for Dr. Ron Ritter), Brian Schoonmaker, Julie Spagnoli, Dr. Andrea Kidd Taylor, Steve Weber

Workgroup Staff: Dennis Howard, Joanna Kille

Workgroup Members Absent: Dr. Judy LaKind, Dr. Clifford Mitchell, The Honorable J.B. Jennings.

The co-chairs called the meeting to order at 10:05am and welcomed everyone. They asked for corrections to the minutes. All were accepted except for discussion between Ms. Berlin and Valerie Connelly with the Maryland Farm Bureau regarding the California Pesticide database. The minutes were approved (changes reflected in minutes now posted on the website)

Delegate Lafferty thanked the workgroup members and general public for being at the meeting. He introduced Dale Hawks, state statistician from the National Agricultural Statistics Service/United States Department of Agriculture (NASS/USDA). He asked Mr. Hawks to discuss how far he could drill down in a survey, and how much a more comprehensive survey would cost.

Mr. Hawks discussed what NASS does as part of USDA (full presentation can be found at http://mda.maryland.gov/Documents/MDA_USDA_MD_PesticideSurvey.pdf.) He has been the state statistician for the Maryland field office for six months. NASS is currently working on the 2012 Census of Agriculture which will be published in late February. The publication has been delayed due to the government furloughs. NASS coordinates with federal and state statistical needs. NASS does not set policy, regulate activities, permit influence or disclose individual reports. They don't favor any group above others. Senator Manno asked about how localized can the data be without violation confidentiality and data protection. Mr. Hawks said a lot depends on what NASS is surveying. If there is one operation in the county or region, they cannot disclose that information. Sometimes with the chemical surveys they run into this problem.

Mr. Hawks said a lot depends on what we are surveying. For example, if there is one operation in a specific county or region, there would be a stipulation as to whether they can disclose that information. NASS does county and watershed information but does not currently conduct surveys at the zip code level. Senator Manno asked if NASS could conduct a survey at this level. Mr. Hawks said they could do it but he is not sure what the cost would be. Senator Manno asked if confidentiality is by statute, regulation or policy. What drives the level of geographic information? Mr. Hawks said that NASS is bound by regulatory requirements. Senator Manno said that it would be helpful if we could know the information by county level. Mr. Hawks said

that NASS can do at the county level estimates on field crops but cannot do chemical information. Delegate Lafferty asked for the watershed, is it chemical or crop? Mr. Hawks said it is by land information. Senator Manno asked how much they had done before. Mr. Hawks said the most recent survey was done at the state level. He said that surveys are also voluntary with the exception of the agricultural census, which is mandatory. Confidentiality and secured data are both required by law (see Power point). NASS does a wide variety of different things, including providing data to EPA for risk assessment analysis. He mentioned NASS' lockup procedures and how estimates are done behind locked doors. Tours of the lockup procedures are available if people are interested. Mr. Hawks also mentioned the data that is available on the NASS website.

Mr. Hawks said that in 2012 they collected data for the pesticide survey for activities occurring in 2011. They also looked at a sample of private applicators (farmers). He said collecting a bigger sample would mean more funding needed. Delegate Lafferty asked how NASS determined the number. There are 12,000 farmers in the state and of those, 1,500 were sampled. With 856 out of 12,000 is that statistically valid? Mr. Hawks said he was not there so he could not comment on the issue. However, from what he could summarize it was a good estimate. Delegate Lafferty asked whether NASS records where the responses are from. Mr. Hawks said they have that capability but it was not used for this survey. He said he could get the information on how they drew the survey and get back to the committee. Delegate Lafferty said you could get a larger sample couldn't you. You send out the first mailing and then a reminder. Mr. Hawks said that is not the only method. There are different modes of obtaining more information.

Ms. Berlin asked whether they gave you temporal information or all of the information at once. She asked what kind of quality assurance is done. Mr. Hawks said that people look over the survey and analyze the data. Dr. Kidd Taylor asked if the sample was a representative sample for the State of Maryland. Since it's a voluntary survey she questions whether it is valid. Ms. Holko said in response to Ms. Berlin it is total pounds applied per year. She also wanted to clarify that in 2000 and 2001 the survey was done at the county level. The last survey was done on a fairly low budget. Senator Manno asked whether you could enhance the survey. Ms. Holko said that any additional questions, etc would be cost-related and what we could pay for. Dr. Taylor Kidd asked what NASS could do to improve survey responses. Mr. Hawks said the planning cycle is three month. Sending notifications via mail is a less expensive method than by the telephone. We can also do both telephone and field follow up. There are many ways to improve the questionnaire. The follow up by phone and field work helps our response rate, as well as doing a bigger sample with farmers.

Delegate Lafferty said with enhanced outreach efforts we could get to 75 percent if we utilized all of the efforts. That comes with a cost. Senator Manno asked whether NASS would do those calls. Mr. Hawks said yes. If you look at the cost of a stamp vs. a person making \$15 per hour the cost could be twice what the current survey cost. Ms. Holko said you could possibly do a regional rotation, focusing each year on one region of the state. That might bring the cost down. There are lots of decisions we could make in how we develop the survey.

Ms. Holko said that MDA likes the NASS survey. The summarized data could be put up through the Maryland open data portal and you could search by data. That is an available option. Senator Manno asked when you provide the customer data being sought, what media form does it come in? Mr. Hawks said we provide aggregated data primarily on a CD. Senator Manno said when you compile the data do you compile it to a database? Are you then precluded from providing data back to us using the database file? If that program was on the website could that be copied as long as you delete whatever information is protected? Mr. Hawks said NASS could make that available as a searchable database. It does depend on cost and how often the survey is done. Dr. Kidd Taylor said she thinks the focus should be on getting more farmers to respond through outreach and more field staff. She also asked about the commercial applicators and private applicators. What if someone wants to know the kind of pesticides being used, where and when. How is that information given out?

Mr. Hawks said that the database could be developed as a searchable database. Confidentiality is always a challenge with the individual operation being disclosed. Delegate Lafferty reiterated that you couldn't disclose the identity. Dr. Kidd Taylor said she was trying to understand what the issues are with confidentiality. Delegate Lafferty said that this issue was covered when representatives from the Farm Bureau and Grain Producers presented to the group two meetings ago. In terms of commercial and private applicators the numbers could increase but not as much. Mr. Hawks said if you had additional follow up it would be possible to get a higher number.

Ms. Berlin said with a fish kill she would like to understand what is used and when. With a birth defect cluster, she wants to look at what women were exposed to. Is there a way to include that information? Mr. Hawks said in general if you were looking at a specific operation, you couldn't get to that level. If you got county and watershed level you could make some conclusions. Delegate Lafferty asked whether you could structure a question about the date of application. Mr. Hawks said yes you could. Ms. Berlin asked if that information was available, what form would it be in? Mr. Hawks said in Microsoft Excel.

Brian Schoonmaker asked about getting more people to response. He suggested emailing. NASS should start with an email first and then send a follow up letter. Mr. Hawks said that was a good point but it is more difficult on the farmer side. Farmers do have internet access but a lot of times email addresses change. Mr. Howard said there is a place on the renewal forms for the email addresses.

Dr. Kutz said he wanted to point out in Mr. Hawk's presentation that this is one of the first scientific surveys in the state where questions are asked about Integrated Pest Management (IPM). More than 50 percent of the respondents said they use some form of IPM. That question should be continued. Dr. Kutz asked if the workgroup would need to address a geographic reporting area or would that be something you would have to work out with state agencies. Senator Manno said the group was not there yet. Dr. Kutz suggested rotating to different geographic areas on a rolling basis. Dr. Miller said there is a data gap with well water. Knowledge about usage could help focus monitoring efforts.

Dr. Kutz asked how you would perceive data separated by zip code, watershed, census track, etc. He said he has done some work involving GIS mapping. He can show it to the workgroup if it's

appropriate sometime. Ms. Holko said that with a database, they would not be part of the mandatory reporting because they are not part of the regulated community. Senator Manno said what about farmers who are general applicators. Mr. Howard said only farmers licensed to use RUPs would have to report but farmers are just like you and me. They would not have to report.

Dr. Bowerman asked whether there is a way with the survey if you are filling it out for a unique id to be sent in as part of the reapplication process. Could you cut them a break on the fee or make the survey mandatory as part of reapplying for your license? Are we trying to get reporting for a network database? If we are talking about something like a fish kill database, we need to go backwards and get the information. We can drill down and relate back to the exposure but in the U.S. we can't get into those databases. Confidentiality issues prevent us from getting the information. Finally, does the information add value for sampling? This is one of the issues we have been grappling with.

Mr. Garrison said he understands this survey taking about 18 months to complete. How long would it take to design a survey that provides more information? Mr. Hawks said it would take an additional 6-9 months and depends on how much you drill down. Dr. Kutz said his experience with NASS is that if there are between 3 and 5 respondents in the geographic area NASS cannot release results because of identifying information.

Mr. Myers asked if NASS would get more of a response because you can compel them to answer. Mr. Hawks said that the actual response numbers are just estimates. Mr. Myers said that in terms of farmers that are just using general use pesticides, possibly we could do similar to what they do with Bay loading numbers. We could assume the loading rate based on cropping patterns. Could we also look at cropping patterns and create the information through GIS as opposed to a survey? That would be more accurate than voluntary results. Delegate Otto said he wanted to clarify that this has to do with pesticide usage and reporting. He is concerned about the term "loading" and that it sounds as though farmers are doing something wrong. This is not an accurate statement.

Ms Dodd said that zip codes are addressed under NASS standards. In certain zip codes you might have just a few farmers. NASS is a much respected entity within the agricultural community. Depending on time of year the survey is sent, farmers might just need a phone call to remind them and make it easier to respond. It is definitely feasible to increase the rate.

Ms. Spagnoli asked how the survey gathered data from commercial applicators. Do you ask for a response from the company or from applicators? Mr. Howard said the information is sent to the company and not to individuals. A single response could cover multiple people. The location information would be specific to that company. He said the previous survey was done at the county level. Ms. Berlin asked if farmers could be required to report general use pesticides. Ms. Holko said that would be a big change from the 2013 proposed legislation. Ms. Berlin said she was concerned about rotating reporting by different regions each year. If there is a 60 percent loss of bee hives as occurred last fall and winter, or an illness cluster, and we only survey a particular region that year where these events have not occurred, then researchers won't have that needed information to assess possible linkages to pesticides used on those regions. It

could be, for example, three years or longer before a region with such events is being reported on. And, what is the incentive for applicators to provide information on a voluntary basis?

There is a difference between filling out survey and database because there is a difference in real time information. This is difficult for those who do not have an electronic format. Ms. Dodd said the survey focuses on total pounds applied for a year. She said that Ms. Berlin is asking for temporal data. Mr. Schoonmaker said if you are looking for temporal data you would have to look at which products were applied on a specific day in the watershed. There are thousands of service tickets that you would have to input. Senator Manno said if we move to a more robust NASS survey and away from a database part of the reason would be cost which is constantly an issue. We will make this information public knowledge.

Mr. Schoonmaker commented about how many hours companies would have to spend on this because each service ticket would have to be duplicated in the reporting system. Over 95 percent of the pest control businesses in the state are one to two man operations and would rather close their business than spend the added time necessary to comply with this. Larger companies will say this is good for my business because it will benefit the larger companies by putting the smaller ones out of business or stunting their growth with the added costs, and they can absorb the costs. Dr. Kidd Taylor said that she thought she heard that if we could obtain information based on zip codes that could be problematic. The best case scenario is how important will this information be for a scientist, what is used, how is it used and what are the health outcomes. And is the Bay contaminated? We do not know. Ms. Holko said in the event of a fish kill or bee kill they will investigate and ask for records. DNR also comes out on those calls as well. Ms. Berlin said if scientists are doing bee kill information the survey results are not quality assured. Delegate Lafferty said that Ms. Berlin's database has non-quality assured information so that argument can't be used.

Mr. Fellows asked what states NASS is located in. Mr. Hawks said that NASS has 46 field offices. NASS has recently restructured the agency by region. Maryland and 10 other states now report to the regional headquarters in Harrisburg, PA. Two and a half years ago, Maryland's NASS office had twelve staff. Now there is no one. Maryland is in the middle of the pack.

Mr. Fellows asked if the NASS regional person for California interacts with the California database. Mr. Hawks said that a lot of the pesticide surveys incorporate information from Cal EPA. They use that information instead of the survey. Ms. Holko noted that Maryland is the only state in the Bay area that has ever done a survey. A NASS survey would inform monitoring. In the past other agencies have requested survey data but that MDA has never had a request for use data at a specific point and location. For acute events MDA has developed scientific manuals on how to conduct investigations. If it is acute, MDA investigates.

Ms. Berlin noted that members of the research working group in the Pesticides in the Chesapeake Bay group, as well as a 2006 USGS report, have stated that there is a need for comprehensive and specific use data regarding what, when and where pesticides have been used and that the data needs to be statistically valid.. Surveys are only valuable if they provide statistically valid

data according to researchers. And, in the database as outlined in previous legislation there would be automatic quality assurance. Mr. Hawks said that NASS data is quality assured.

Senator Manno said perhaps Mr. Hawks could provide list of different formats you could present information in, i.e. excel or another database form. And you could still easily block out privileged information. Dr Kidd -Taylor said in order to get more people to respond there needs to be an incentive to get them to respond. Senator Manno said there is a laundry list of different ways to get people to respond. Delegate Lafferty asked for cost breakdowns for MDA to have a better handle on cost differentials. Mr. Hawks said that incentives do increase participation but it is very minimal. The type of incentive depends but it doesn't really work.

Delegate Lafferty said there needs to be an agreement or conclusion for the interim report. It is based on cumulative information from workgroup members. In his opinion there is still a wide discrepancy between each person. It is basically a survey vs. mandatory reporting. There are a lot of questions about the data, as well as the existence of gaps. There may be some decisions on how valuable the data really is. Senator Manno said going into the 2014 legislative session there are a lot of other issues on the table and this might not be at the top of the list. Are there ways we can advance level of information that is available. Mr. Schoonmaker asked whether there would be a way to support more people converting to technology. Delegate Bartenfelder noted that when he is out in the field, how can he download his data.

Delegate Lafferty noted the following:

1. Privacy. If NASS becomes the vehicle then privacy is not an issue. But going in a different direction means we need to do everything we can to protect data.
2. If we go the way of a NASS survey we need to make it more robust. There is a way in which data can be collected. Starts to move us in that direction. More data, more information.
3. The pesticide registration fee has not been raised in 10 years. There is an opportunity for education and assistance for farmers and applicators and for more data gathering.

A workgroup member commented that a database will put the responsibility on MDA to go towards a web-based system. If you have more information it will help them make decisions. Dr. Bowerman said that having a rotating regional reporting is desirable but then you need to determine whether it should be at the zip code, watershed, or county level.

Senator Manno noted there are issues regarding retailers reporting and this concept is not ready for primetime. He needs to get some sense among the group about the issues and at least fulfill the workgroup's statutory mandate. He is not clear what the interim report must include or what the final report will include. If legislation is required, do we do that in January after interim report or do we wait for final report. We will do an interim report. We have identified use data gaps. Do we agree on that? Delegate Otto said there are some existing gaps. There are problems as to whether we do need a data reporting system. He doesn't think to have accurate data that we have the resources to do a comprehensive system. Resources should be put into things that will help Maryland citizens, maybe like more monitoring. Ms. Spagnoli talked about models, risk assessment and more sophistication.

Senator Manno asked if anyone has any comments on the bullet points they sent out. Mr. Weber said there are things in here we have never discussed and didn't see how we can do this without going through point by point. We never have enough information and it needs to be looked at as a whole. We have spent a lot of time on the needs. He said he is from a different world and has been through the Food Quality Protection Act process. There has been so much work already done on things that are allowed to be used, and risk factors based on maximum use are already taken into account. He has a very thick book at home with labels and will never use the highest rate he can use. The need needs to be looked at as a whole. He is concerned that certain things could get targeted. An abundance of caution should be the way you look at things. He likes the idea of an enhanced, robust survey but we need to figure out exactly what the problem is.

Mr. Weber went on to say that 25 percent of everything produced in this country comes from California and the Central Valley. If you look at other state reporting systems, eight out of ten of them are not working. He said we should focus on just a few things. He does not, for example, know where the recommendation to add environmental and public health advocacy representatives comes from. Delegate Lafferty said he would delete that recommendation.

Senator Manno said we do need the data but there is a problem with privacy and cost pertaining to the database. Possibly we should try the NASS survey to see how it works and it does protect privacy. Ms. Holko said if the information is in a database format, MDA would need authority to keep the information confidential. Senator Manno said he personally would like a database but we can't do a database unless we figure out how it would be paid for and how much funding is too much. Can we throw out ideas ie. develop a more robust NASS survey. Possibly you could increase the registration fee from \$100 to \$125. The information could compliment the field surveys that MDE does. Delegate Otto thought that increase would be too much. Mr. Myers was not sure if you could raise the fee without knowing the cost. Ms. Holko said that MDA might not have to raise fees to do a robust survey, and MDA would not need legislation to get additional authority. Ms. Spagnoli said you are talking about a fee increase on products that have nothing to do with this information.

Delegate Otto said we should look at what kind of expense is involved with an enhanced survey. If it's a modest fee increase then it is not a big deal. Delegate Bartenfelder said there has been a lot of discussion and agreement that doing water quality monitoring in different parts of the state is a good idea. That is a key point so we can see what and if there is a problem.

Mr. Myers said perhaps you could mandate that licensees have to provide information in order to get their licenses. Or perhaps we could look at a set of risk analysis, taking into account maximum use assumptions. If there are a total of 461 chemicals used in Maryland perhaps there would be some utility for a workgroup to look at chemicals and narrow the analysis Also, could simulated models be developed to find a way to get supplemental information.

Senator Manno said the survey would take some work to make it affordable. He would like there to be a more robust survey so you can query the information in a matter of seconds. He also thought that we could require mandatory reporting through licensing requirements. We could model that information up for farmers as well.

Mr. Fellows said whether it is mandatory or voluntary the scientific utility of a database is important to us. He is seeking to develop a database that meets the threshold. For information on releases on neighboring properties, on the aggregate ways in which migrant workers might get exposed a database would be helpful to farmers. Scientists would find this information valuable. He said the interim report should include “principles” and he thinks there is some consensus

Mr. Garrison said the information sent out by the co-chairs for the interim report draft include agency responsibilities. He has reviewed and is ok with the responsibilities. DNR is focused on the NASS approach. He is concerned about privacy issues. Perhaps you could go through a third party and strip out the useful information. The NASS approach is much easier. Other options could be a rotational process. Lesser survey work just to maintain continuity. If you come back after a few years many things may have changed, for example in Southern Virginia they rotate crops. Mr. Weber said the ratios would still stay the same. Crop rotation is not a big deal. Delegate Otto said that you have different pests from year to year. One year you might have to spray for a specific pest and the next year you might have something else.

Delegate Lafferty asked what is the greater scientific utility? Mr. Garrison said we manage water inland and water resources. The watershed is drainable. Dr. Bowerman asked whether we are chasing a problem. Specific things are key when there is a problem. What is the cause and what is the effect. Do we have data that will show us the trends, especially pesticide products that are problematic? And the goal is important. The goal is what we state, for example protecting human life and the environment. We don’t have an unlimited amount of money. What is the best bang for our buck? Senator Manno asked about the NASS survey. Mr. Hawks said if farmers see the need to respond and the value they will respond. A shorter survey vs. a longer survey really doesn’t matter.

Dr. Kutz said as a scientist he likes to see as much data as he can get. However, as a taxpayer in Maryland, he is concerned about the cost. An enhanced NASS survey would be better. We should try that before we jump into the fire. A survey report of usage could be designed to look at trends and is statistically possible. He is not sure about regional rotation. He would like to see information from the whole state. Zip codes and census tracts, however, are based on population. Some zip codes, like 21811, are huge and won’t tell me much. The census tract doesn’t help either. We could possibly look at the sub-watershed area. He asked that both the interim and final reports stress the relationship between monitoring and use. He asked if they would drop the recommendations for the expansion of the Pesticide Advisory Committee.

Ms. Holko said that as a state agency it would be difficult to support a fee bill. That being said, the best thing the State of Maryland is doing is protecting Maryland citizens. Mr. Howard’s program protects people from harm. She is very concerned about resources being taken away from his program. She is concerned about the recommendations because anything that is taken away from the existing program detracts from protecting the environment. She likes the NASS survey. If you have mandatory reporting, however, NASS won’t be able to tell us who actually responded and the only way is if the respondent gave permission. Senator Manno asked if this issue could be worked on. Mr. Hawks said yes. Ms. Holko mentioned NASS cropping acreage and overlaying pesticide practices as one option.

Dr. Miller said he was not speaking on behalf of the Maryland Department of the Environment (MDE). He believes the information from NASS would be valuable but is concerned about NASS and how that would help. If a reporting infrastructure was in place you could possibly assess only one or more pesticides. NASS could be useful for monitoring purposes, but a true database could answer many questions. Two considerations that have been raised are the level of temporal and spatial detail. The findings in the interim report could provide observations in many ways. For example, we could say that while there is a general agreement on the need for a reporting system, there is a diversity of perspectives about how resources should be used.

Senator Manno asked Dr. Miller what MDE thinks. Dr. Miller said when considering NASS vs. a reporting system there are some nuances for all of this and he cannot offer a departmental perspective at this time

Dr. Kidd Taylor said there are data gaps and believes we do need a pesticide data reporting system. What do we do now? She is interested in what the interim report will say. She has to think about whether the NASS survey would be good for now and then move to a database later. She is questioning whether the survey will be enough.

Ms. Berlin said that we need to ensure privacy of applicators submitting their use records to a centralized database and that based on input from researchers, creating a database makes a lot of sense. If we are going to put resources into it, and need to be cost-effective, maybe it's better to just look at 20-30 chemicals initially, as Mr. Myers suggested. Senator Manno asked whether there is a state that does this. Ms. Holko said they do in Arizona for groundwater. Ms. Berlin said that the Arizona system was different from what we have been discussing, but maybe gradually adding pesticides to be reported on is better than having a set list. Ms. Berlin asked if there is any way for the NASS survey to be mandatory. She noted that regional rotation would not be useful to experts because as Dr. Ian Hartwell told the workgroup, researchers need to know what was used, where and when, and you can't conduct monitoring without knowing what you are looking for. Mr. Schoonmaker said that Ms. Berlin mentioned temporal and geographic responses. His concern is about how much work that will create for his industry. If it was really needed he is not sure. He believes that this is an answer in search of a problem. He believes the focus should be on monitoring if we are going to spend money. As far as the bees go – has already happened. Pesticide labels are changing January 1, 2014 regarding bees. What we have in place is already working. These changes are mandatory for all applicators and apply to all products on the list. If there is a problem with a certain pesticide then it would be better to focus on that.

Ms. Spagnoli said she supports a NASS survey but an increase in the registration fee specific to support this effort would be problematic for industry. Products such as disinfectants, insect repellants, pet products, etc. would not be subject to reporting and registrants of these products will likely not want to have to pay an additional fee. Various states have complexities in their programs. The industry's general position is for registration fees to support the registration and product enforcement processes. . If they use fees to support other programs then that becomes the principle of the issue. There has not been opportunity to vet this with the industry yet. The Mil assessment in California is a separate fee. Florida also has some kind of funding stream for their food testing laboratories by charging an additional fee only for food use pesticides. Ms.

Dodd said that as far as protecting privacy, NASS goes a long way. If NASS data could do searchable database through MDA it would be good. \$5-\$10 would be a small increase but \$25 to \$50 would be different. Air and water monitoring is a good way to look at exposure. Use does not equate to exposure. Senator Manno said if people have additional findings, etc for the interim report please email the information to Roger, Steve and Joanna.

Mr. Fellows said if we are going to vote can the minutes go out for review ahead of time so we can refine and redraft anything? However we vote there will be a little confusion. Senator Manno said that they will need some consensus. Mr. Fellows said the general direction may be good. Ms. Berlin asked whether NASS can be a mandatory survey. Senator Manno said that we have time constraints if we are not done especially if we have any hope of doing anything during the 2014 session.

Senator Manno asked what a threshold of a response would be if the approach was the NASS survey. Ms. Berlin said that the scientists said if it was a voluntary survey it should be an 80 percent response rate. Senator Manno said that legislative recommendations must be consensus-driven. If we want to come back to make further tweaks we can. There should be an agreement on “scientifically useful” data. We should explore a more robust NASS survey with more specific information, and include all of Maryland. There are things that can be included. By the next meeting we will have reviewed a proposed interim report.

Delegate Otto said before you determine the fee you need to figure out the cost. Ms. Berlin said they raised the fees in DC from \$100 to \$250. Mr. Fellows said he agreed that a modest fee increase would be good with the recommendation being to get to a specific number.

Senator Manno said there was some interest/opposition to expanding the NASS survey. He asked Mr. Hawks to determine how much it would cost for a mandatory vs. a voluntary survey. He would caution everyone what would happen when it goes to the Legislature. Do we want to not address issue of mandatory reporting system? Delegate Otto said let the mandatory system go. The final report could focus on next legislative session.

Ms. Berlin said that there were several options – a mandatory reporting database, mandatory reporting on a smaller number of chemicals, or a robust NASS survey that provides statistically valid level data as identified by public health, Bay and honeybee researchers. . Mr. Fellows said that there should be a legislative effort to move to the goal. Senator Manno said there were three concepts: a mandatory reporting system, a NASS survey and an expanded NASS survey. We need to figure out what folks want to introduce if anything in January

The meeting adjourned at 1:25pm.