CONTINENTAL DIALOGUE ON NON-NATIVE FOREST INSECTS & DISEASES FOURTH DIALOGUE MEETING NOVEMBER 12-13, 2008

Meeting Summary and Action Items

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Meeting Summary and Action Items

I. Overview and Background

On November 13-14, 2008, a diverse group of representatives from state, federal, and municipal agencies; private business and industry; academia; and non-governmental organizations gathered in Grand Rapids, Michigan for the fourth meeting of the Continental Dialogue on Non-Native Forest Insects and Diseases (the Dialogue). The meeting was convened by the Dialogue Steering Committee, a cross-section of stakeholders with an interest in protecting forests from the threat of non-native insects and diseases.

The goal of the November 2008 Dialogue meeting was to advance collaboration around actions to address the threat of non-native forest insects and diseases. Specific objectives included:

- Tie local-level challenges and solutions to national policies and strategies
- Enlist communities in the battle against non-native insects and diseases impacting their trees
- Identify and agree on needed actions for the Dialogue to take in the upcoming year

NOTE: Attachments and presentations are available online at the following URLs:

- Attachment A Meeting Participant List: http://www.continentalforestdialogue.org/documents/meetings/2008-11/
- Attachment B Steering Committee Roster: http://www.continentalforestdialogue.org/committee.aspx
- Attachment C Dialogue Flip Chart Notes: http://www.continentalforestdialogue.org/documents/meetings/2008-11/
- Attachment D Summary of 2008 Workgroup Activities: http://www.continentalforestdialogue.org/documents/meetings/2008-11/
- Attachment E Transition Letter: http://www.continentalforestdialogue.org/workgroups/transition
- Presentations: http://www.continentalforestdialogue.org/documents/meetings/2008-11/

II. Day One – Wednesday, November 12, 2008

A. Welcome and Opening Remarks

Ken Rauscher of the Michigan Department of Agriculture welcomed the participants to the meeting on behalf of Governor Granholm, the mayor of Grand Rapids, and the director of the Michigan Department of Agriculture. He noted that Pat Lockwood, liaison to Governor Granholm, had planned to attend, but was obliged to send her regrets due to a scheduling conflict. Gratified to see the number of attendees from the state and across the country, Mr. Rauscher observed the

significance of having a cross-section of people interested in invasives, from both the urban and traditional forest sectors, present at the meeting. As a center of shipping and transportation, he pointed out, Michigan is victim to a number of invasives, and not only to forest invasives.

John Randall of The Nature Conservancy (TNC) also greeted the participants and emphasized the importance of the issue of invasives to TNC. The organization recognizes that invasive pests are extraordinarily destructive and could reverse TNC's gains in protecting forests. TNC is therefore grateful to see the level of collaborative effort and engagement in the Dialogue. Mr. Randall thanked Ken Rauscher and the other members of the Dialogue Steering Committee for their hard work in organizing the fourth Continental Dialogue meeting.

B. Orientation to the Continental Dialogue

Frank Lowenstein, TNC, a member of the Dialogue Steering Committee, followed with an overview of the <u>vision</u>, <u>goals</u>, and role of the Dialogue. He explained that the Dialogue was created in response to an initial survey of stakeholders that revealed all involved knew the issue was critical, but also felt powerless to address it and lacked a forum for communicating with other stakeholders.

Mr. Lowenstein explained the Dialogue's governance structure, noting that the Steering Committee operates by consensus and serves as the voice of the Dialogue when it speaks in the public realm. He also noted the Dialogue does not lobby and will not speak for participants of the Dialogue unless they give explicit permission to do so. Mr. Lowenstein likened the Dialogue to an airport, offering the following parallels:

- Any interested person can enter (i.e., voluntary participation with limited screening)
- There a variety of flights taking off (i.e., issue-specific workgroups)
- There is an overarching commission making decisions about the timing and destination of flights (i.e., Steering Committee)
- There is air traffic control (i.e., RESOLVE)
- There are a variety of ground transportation options to move things (i.e., research, white papers, letters, meetings with public officials)

Mr. Lowenstein concluded by describing some of the Dialogue's key accomplishments to date:

- Launching a leading website on the movement of firewood
- Establishing a forum for stakeholders to reach consensus on regulations
- Engaging members of Congress on the issue of invasives
- Helping to shape a resolution of the U.S. Conference of Mayors
- Contributing to the effort to secure more federal appropriations for invasives issues

C. Continental Dialogue's Activities

A panel gave an overview some of the Dialogue's Workgroup activities over the past year and outlined opportunities for participants to become involved in 2009. (Additional Workgroup activities are addressed below in the breakout group sessions.) For a full summary of 2008 Workgroup activities, see Attachment D.

Workgroup #1: Prevent Introduction of New Pests and Diseases

Import Plants Not Pests: Changes to Q-37

Faith Campbell, TNC, explained that Q-37 is the most important pending rulemaking for preventing new introductions. Although it has been almost four years since the Advanced Notice of Proposed Rulemaking (ANPR), the Workgroup hopes the rulemaking will move forward soon. Since December 2007, the Dialogue has communicated its consensus recommendations to APHIS by engaging in the following activities:

- Ms. Campbell visited four key states and made contact with additional states
- Steering Committee members met with USDA Chief of Staff Dale Moore and Undersecretary Bruce Knight
- Members sent a number of letters to U.S. Secretary of Agriculture Edward T. Schafer

Ms. Campbell informed participants that they could take a role in urging USDA to move forward with the rulemaking. Once the agency issues its proposals, Dialogue members can become involved in reviewing them and encouraging appropriate actions. Ms. Campbell encouraged members to work on building public support and political will for Q-37 through actions such as placing editorials in newspapers and contacting key political connections.

Workgroup #2: Limit the Spread of Pests and Diseases in the U.S.

Wooden Pallets: An Important Domestic Pathway

Ken Rauscher explained that Workgroup #2 had drafted a letter urging the Secretary of Agriculture to adopt international shipping standards (ISPM 15) for regulating domestic wood packaging material. A broad coalition of 16 groups signed on to the letter, which was sent to the Secretary in June. A rulemaking is currently in progress. Activities for next year could include conducting a risk assessment for the ISPM 15 approach.

Workgroup #5: Increase USDA's Funding for State and Federal Efforts

Money in the Bank: Finding Funding for Needed Actions

Faith Campbell described the activities of Workgroup #5 in support of appropriations funding for the work of USDA's Animal and Plant Health Inspection Service (APHIS) and the Forest Service in carrying out prevention and response actions to invasives. 16 groups signed on to a letter on APHIS funding, and 14 signed on to another supporting funding for the Forest Service. In addition, Workgroup members made Congressional visits, obtaining the support of a quarter of the Senate. Ms. Campbell observed that the group had established a good foundation for the 111th Congress. In 2009, she added, Dialogue members can contribute by helping to lobby Congress, participating in the prioritization of activities to support, and educating representatives from their states.

Workgroup #6: Communicate and Market Key Ideas about Protecting Forests

Addressing Issues Associated with the Transport of Firewood

Martin Hamburger presented the Don't Move Firewood (DMF) website to the group (www.dontmovefirewood.org), showing screenshots and a sample video from the site. He explained that initial research on attitudes towards firewood had revealed that people are willing to change their behavior once they are informed of the issue. In creating the website, the Workgroup aimed to make it educational, fun, informative, viral, and effective.

The website was launched in July, has already received several awards, and is highly ranked on Google. The next step is to drive more traffic to the website. Dialogue participants can help in this

effort by linking to the website, submitting blog posts, and emailing others with the website link. Future plans for the website include developing social networking applications, advertising, creating additional videos (including a documentary on the Worcester, MA infestation), and conducting a survey to determine the website's effectiveness. Currently there are eight organizations supporting the DMF website, which constitute the website's oversight committee; if others wish to join, they should email Leigh Greenwood at lgreenwood@trc.org.

Questions & Answers

After the panel presentation, a participant asked about the U.S. focus to the activities. Frank Lowenstein responded that the Steering Committee has recognized that the Dialogue does not have as broad a constituency as it would wish; ideally, the Dialogue would include representatives from both Canada and Mexico. He was pleased to note, however, that some of the meeting participants were from Canada. He added that some Steering Committee members are involved in the North American Plant Protection Organization (NAPPO) and carry the Dialogue's issues to that forum.

D. Living with Invasive Species at the Local Level

Eradicating ALB: Lessons Learned on Outreach, Specific Actions, Obtaining Funding, Interagency Coordination

Joe McCarthy of the city of Chicago discussed the lessons learned from the city's experience of dealing with Asian Longhorned Beetle (ALB). The beetle was discovered in Chicago in 1998, and, through an aggressive program of eradication, the city managed to eliminate the infestation by 2008. The program aimed to eradicate the invasive pest and included provisions for implementing an emergency rule, reimbursement for cost incurred, and restoration of the affected area. Mr. McCarthy cited the following keys to the success of Chicago's program:

- Political support Mayor Richard Daley was known as the "tree mayor" and was committed to the cause. The program's goal was to save trees, removing only infested ones and replanting those that were removed at no cost to homeowners.
- **Media role** the media was essential in reporting beetle sightings.
- **Cooperation** state and federal agencies, nongovernmental organizations, and the public worked together, each bringing their strengths to bear and presenting a united front.
- Accountability and open communication an ALB office and hotline were established.
- Innovation the city made use of tree climbers and bucket trucks in its operations.
- **Protective treatments** although not curative, the treatments may have helped protect some trees. Research into their effectiveness is ongoing.
- **Quarantine status** the quarantine was helpful as an educational tool and expedited removal of infected hosts.
- **Beautification committee** provided true value replacement for lost trees.

<u>Living with EAB: Lessons Learned on Education, Approaching City Government, Restocking Forests, Engaging Active Community Groups</u>

Paul Dykema of Lansing, Michigan described the experience of living with Emerald Ash Borer (EAB). The city has numerous ash trees, and Mr. Dykema estimates 7.8% of street trees will be affected by the infestation, while most neighborhoods will lose 3%-5% of their trees. Dead trees threaten power lines and pose a danger to citizens, and removing them is both costly and difficult.

In the context of high unemployment, residents cannot afford to pay for removals. No additional resources are available to the city to deal with EAB, so other city programs must take cuts in order to address the problems. Meeting participants asked several questions, and Mr. Dykema responded as follows:

- Lansing runs its own nursery systems, and even though the costs of replacement are minimal, the planting program lacks the resources to keep pace with removals.
- Lansing puts the logs through chippers for mulch or sends them to wood-burning power plants.
- Although there is no formal sharing of costs or labor with utility companies, the power companies are municipally owned. The city takes care of right-of-way removals. In residential yards, the power companies will first clear the power lines so the commercial company can cut down the tree.

Bob Paasche of the city of Grand Rapids observed that his city's program was similar to Lansing's, although it was more on the outer edge of the EAB infestation and had yet to go through much of what Lansing experienced. Anticipating the arrival of EAB, Grand Rapids inventoried their street trees and developed a response plan, which included chemical treatment, removals, ash inventory reduction, assistance to property owners, and a website to disseminate information to the public.

When an infestation was found in Grand Rapids, the city brought it to the attention of the media and held neighborhood meetings to present the options. Property owners had the option of taking on treatments and exempting their trees from the cut list. Otherwise, the city would do tree removals and replacements (owners could upgrade in replacement size if they paid the price differential). The city encountered some opposition to removals, and, and a result of discussions, agreed to a pilot program of soil injection in parks and high-traffic streets.

In terms of managing the infestation, the city of Grand Rapids remains concerned with preserving public safety, handling the work load, and ensuring that funding for the program is sustained. Mr. Paasche noted a few positive changes because of the program, pointing out that species diversity is improving and the community has become involved in caring for a healthy urban canopy.

Mapping the Future for Emerald Ash Borer Readiness and Response Planning

In anticipation of the coming EAB infestation, the city of Milwaukee has been preparing and planning its response. **David Sivyer** outlined the city's planning efforts and detailed the mapping initiative to inventory its ash trees. As EAB has not yet reached Milwaukee, the city has benefited from the lessons learned and recommendations developed in other places, such as:

- Early detection is very difficult.
- Once EAB is detected, the population explodes.
- It is important to understand the resource you are managing.
- A budget sufficient to remove the majority of the city's ash within five years is needed.
- The city should plan for a spike in wood waste.
- Diversification is an important goal.

Milwaukee has undertaken a three-pronged strategy to conduct an EAB risk assessment and to inventory its tree cover, including a spatial GIS street tree inventory, an Urban Forest Effects Model (UFORE) analysis, and hyperspectral imaging. The technique of hyperspectral imaging allows the

city to develop a species map with a high degree of resolution. At a cost of approximately \$190,000, Mr. Sivyer asserted, this is a cost-effective way to assess a multi-million dollar asset. After combining the hyperspectral mapping with LIDAR and GIS data, the city will have a map indicating the location of all its ash trees. Mr. Sivyer concluded that hyperspectral imagery is an effective tool for managing invasives, giving city officials the ability to make informed management decisions.

Mr. Sivyer then answered several participant questions:

- The ability of hyperspectral imaging to distinguish healthy ash from unhealthy ash depends on the spectrum analyzed and bandwidth detected the narrower the bandwidth, the better the data separation. The U.S. Forest Service is doing some research on this question, but results are not yet available. Milwaukee's Hyperspectral imaging project collected spectral signatures from healthy and visibly unhealthy ash trees with an expectation that the Hyperspectral sensors will be able to distinguish imperceptible stress in ash species and provide improved early detection protocols for Emerald Ash Borer.
- Once the ash trees are identified, Milwaukee forestry staff will utilize the ash species map to complete targeted inspections of ash trees on private and other public property, and provide Emerald Ash Borer outreach information to residents with ash trees. The city plans to preemptively inject ash street trees biannually to protect them from Emerald Ash Borer and preserve the street tree canopy while transitioning to resistant species over many years.
- The city will own the results of the mapping exercise, which will be an ash species GIS layer that can be integrated into the city's GIS database. The consulting firm conducting the mapping will retain the data sets.
- The hyperspectral imagery for Milwaukee will be analyzed and available in early 2009. There is funding in the city's 2009 budget to purchase the ash map layer.

E. Resources and Approaches to Effectively Address the Problem

Invasive Forest Pests in Time and Space

Deb McCullough of Michigan State University gave an overview of a study initiated in 2007 by a National Center for Ecological Analysis and Synthesis (NCEAS) Working Group to examine the economic and ecological impacts of invasive forest pests. The goal of the study is to generate knowledge to inform policymakers' decisions. To approach the question, the researchers first generated a long list of alien insect species in the U.S., and then narrowed it to a shorter list of the "bad actors" known to cause economic damage. This exercise revealed that the U.S. has acquired a new invasive species approximately every 1.5 years, and a new bad actor every four years (although Dr. McCullough cautioned this rate of occurrence could change with additional data). From the short list, researchers selected four "poster pests" – EAB, gypsy moth, sudden oak death, and the hemlock woolly adelgid – and will fully analyze the economic and ecological impacts of those four.

Demonstrating the Alien Forest Pest Explorer tool on the Forest Service website, Dr. McCullough illustrated the significant threat that invasive forest pests pose to Eastern forests. She observed there are a number of possible explanations for the distribution of forest pests in the U.S. Looking at the maps, a participant suggested that high human population density seemed to parallel areas of greater pest infestation, and Dr. McCullough agreed that it could offer an explanation. Another participant wondered whether the increase in borers could be related to increased trade with Asian markets. Dr. McCullough replied that causal factors had not been directly examined. While there seems to be a

parallel between Asian species and imports, she also noted that a number of boring beetles originate from Europe.

Surveying

Mike Philip of the Michigan Department of Agriculture described the method the Department uses to select sites for exotic woodboring insect trapping. Given that the Department does not have the resources to place traps everywhere, the site selection process is risk-based. First, satellite imagery reveals the areas in the state with a high concentration of flat roofs and pavement, which correlate with the warehouses and factories that are often the destinations for shipments carrying exotic woodboring insects. That map is then overlaid with port-of-entry data collected by the U.S. Department of Homeland Security and the USDA. When shipments are intercepted and found to contain solid wood packaging material violating international standards, the intended destinations of those shipments are recorded. Combining that data with the satellite imagery helps the state determine where to allocate traps and resources.

Mr. Philip emphasized that the receiving companies are not at fault and the Department of Agriculture does not take enforcement actions against them. A participant asked whether the Department shares the data with the receiving companies to alert them to the problem and offer them the opportunity to work with their suppliers to adjust practices. Mr. Philip responded that the Department had not done that and concurred that it was a good idea.

Emergency Response

Jeff Coath of the APHIS Illinois Field Office discussed the lessons learned from the emergency response to Chicago's ALB infestation that can be applied to the new threat from EAB. Three critical elements of the ALB response were that it was mission-driven, focused, and transparent. Mr. Coath pointed to several of the reasons for success that Joe McCarthy had mentioned – partnerships and cooperation, local community engagement, political support, and the positive role of media coverage. He also added the importance of an innovative professional staff; specific protocols that were developed and refined (such as the use of the bucket truck/climbing hybrid); and access to homeowner property due to open lines of communication.

To prepare for a new threat from EAB, Chicago is developing a management plan that draws on these lessons, and has begun identifying available resources and organizing the agencies that will take action. One difficulty the city is facing is communicating to the public that EAB is not ALB.

A group member asked if Chicago had shared its experiences with other states, and Mr. Coath replied that more could be done in that area. In response to another question about coordinating with other townships in Illinois, Mr. Coath said that there is currently a lack of coordination, although APHIS is working with a municipal team in northeastern Illinois. The office would like to develop a regional response plan and take advantage of opportunities to pool resources and share information.

Outreach

Sharon Lucik of USDA gave a presentation on the successes of outreach efforts on EAB. She explained that outreach is a dynamic process over time and messages must be viewed multiple times in order for the message to be communicated to the recipient. To ensure continuity of message, the outreach program settled on five messages to disseminate:

- Don't move firewood
- Visually inspect your trees
- Know state and federal regulations
- Spread the word
- Ask questions

In their EAB outreach efforts, USDA benefited from national media attention and the cooperation of diverse groups, including the Weather Channel, NASCAR, and the Louisville Slugger website. She observed that these partnerships are effective in part because people are more likely to read the message if it is not coming from a government entity. Another important factor in EAB outreach was the installation of purple insect traps. As a visible reminder of the EAB problem, people took notice and began calling the hotline with tips.

Biocontrol

Leah Bauer from the U.S. Forest Service Research Station in East Lansing talked about the development of a biocontrol program for EAB. Interest in biocontrol options has been growing, she noted, because eradication methods have proven ineffective with EAB. Dr. Bauer defined classical biocontrol as the importation of specialist natural enemies for the sustained control of a previously introduced pest. The International Organization for Biocontrol recommends using biocontrol when a species is not native, has been established for at least five years, causes economic or ecological damage, and eradication is not possible. Dr. Bauer pointed out that the case of EAB fits these criteria. The steps involved in undertaking classical biocontrol are the following:

- Studying the biology of the invasive species
- Surveying for native natural enemies
- Foreign exploration for natural enemies
- Selection of potential biocontrol agents
- Importation and study of those agents in quarantine
- Preparation of an environmental assessment
- Requesting permits for field release
- Selecting field sites, mass rearing and releasing the agent
- Determining the establishment of the agent, its efficacy and impact

To locate a biocontrol agent for EAB, researchers traveled to China, where they identified several parasitoids that are natural enemies of EAB. Studies of these parasitoids in China revealed that they can reduce EAB populations by approximately 75%. Three parasitoids were selected, and after securing the necessary permits, they were released in Michigan in 2007 - 08. Two of the three have established themselves at the release sites, while one is not yet confirmed to be established. Researchers intend to continue gathering data and monitoring the sites to evaluate the efficacy of the program over a period of five years.

F. Discussion: Addressing Local Invasive Species Challenges

Paul De Morgan, facilitator of the Continental Dialogue, opened the discussion on participants' experiences with local invasive species by posing three questions:

• What has helped address local level challenges in your experience?

- How can the national efforts help address local level challenges?
- How can local experiences help promote national level prevention efforts?

The group discussed how to help people realize the importance and urgency of preparing for and responding early to invasive species infestations. Some participants offered examples of what they had done, such as using university extension programs to create and distribute resource notebooks to all the counties in the state (whether EAB had reached them or not) and working with master gardeners on early detection. One participant mentioned that his city's outreach plans included a billboard campaign to communicate the benefits of the city's trees (energy savings, etc.) to the population in hopes of creating a groundswell of support to motivate politicians. Group members also generated some suggestions for future outreach strategies:

- Produce case studies of the experiences of Chicago, Lansing, and other cities, describing the process they went through and what needs to be done to confront invasives.
- Use the DMF website to leverage activist communities and help people understand the consequences of invasives.
- Get those with credibility on the issue to speak out, such as state and city foresters, park rangers, and especially those who have experienced the problem, like local homeowners. Their stories could be videotaped and disseminated on the DMF website.

Others noted that despite outreach efforts, public detections of invasives often occur too late. A participant cited the example of Purdue University's effort to encourage early detections by offering a class for pest professionals working in warehouses, as they are often the first to come into contact with invasive insects.

Addressing the question of how national level efforts can help, participants came up with several ideas:

- Develop a handbook of successful and unsuccessful approaches to dealing with invasives and make that information available across the country.
- Share outreach materials and templates developed in one area with other places, as the states in the upper Midwest have done. A participant noted that EAB materials developed by USDA are provided free to all who request them.
- Devise landscape ordinance templates that call for species diversity in order to help prevent the next infestation.
- Comment on the certification guidelines underdevelopment for sustainable sites (potential opportunity for the Dialogue).
- Encourage the media from outside impacted areas to talk to those who have experienced EAB.
- Participate in National EAB Awareness Week and on the monthly calls of the Communications Association of the Department of Agriculture (especially representatives of areas that have not yet been affected by EAB).
- Focus on communicating about the pathways (e.g., firewood) rather than a specific pest; figure out how to reach all homeowners and municipalities, not just those who have been impacted.

III. Day Two – Thursday, November 13, 2008

A. Continental Dialogue Transition Package

Lin Schmale, a member of the Steering Committee, presented the proposed transition package to the Dialogue (see Attachment E). She explained that the objectives of the transition letter are to ensure the new administration understands the Dialogue's goals and, that they work to implement them. The letter gives an overview of the Dialogue and addresses four of the Dialogue's major issues – preventing new introductions, instituting regulations on solid wood packaging, increasing financial resources for invasives issues, and implementing a national invasive species management plan. Four documents illustrating the Dialogue's consensus positions will be attached to the letter. A Dialogue participant suggested including an attachment describing the benefits of forests with the transition package. Others agreed with this idea, so the transition subgroup will work on preparing a benefits fact sheet to accompany the letter.

Several organizations have already signed on, and the letter will be circulated to the full Dialogue in the week following the meeting with an invitation to join. If groups are interested in signing, they should email Paul De Morgan (pdemorgan@resolv.org) with the name, title and organization of the signatory. Dialogue participants may also circulate the request for signatures to other potentially interested organizations.

B. Breakout Session: Appropriations and Policy

This breakout session focused on: 1) potential Dialogue activities related to appropriations; and 2) policy issues including APHIS regulation of interstate movement of firewood, state flexibility to prevent introductions, and compensation.

Breakout session participants identified a number of potential efforts to increase funding for prevention, early detection, containment/control, and eradication of nonnative forest insects and diseases. The group agreed that an effective message must accompany any appropriations requests, including examples of past successes and failures and these activities' connection to funding levels. For example, a message could outline the avoidance of cost associated with successful efforts to slow the spread of milfoil in Minnesota. Many were in favor of an appropriations framework with the following priorities: 1) prevention of new pests; 2) containment of pests; and 3) "triage" or pest control and management.

To help convey the message, breakout participants discussed the development of a "lobbying 101" package, which would take the additional step of tailoring the message to state delegations, including state-specific information such as infestation data and control efforts. An explanation of relevant issues would be paired with funding requests for specific programmatic needs (e.g., prevention, eradication) at the local, regional, and national level. Important questions for consideration include whether the appropriations requests should be aimed at a long-term continuing resolution, as part of an omnibus bill, or for fiscal year 2010. This and other potential activities are described below.

While there is not agreement that national policy is the only or best vehicle to prevent interstate movement of firewood, breakout participants agreed that further discussion would be useful on potential regulatory and non-regulatory approaches for federal, state, and other actors.

The group received advice that official control is under discussion at APHIS, and decided that the appropriate next step would be a letter to APHIS expressing support for their review of this issue. Regarding special needs, participants generally felt that states are already considering this opportunity, and thus no Dialogue action is needed at this time.

Finally, breakout participants decided it would be useful to further explore the topic of compensation through research on the range of possible formats (e.g., federal compensation/deduction, state level, private, local property tax). A subgroup will be involved to frame the questions to be explored in a white paper and assist with the selection of a consultant.

Workgroup #4 – Address Policy Issues – Official Control	Who	Completed by
Draft letter expressing interest in/support for APHIS exploration of official control	Frank L., Ken R.	Monday, March 2
2. Finalize official control letter (as appropriate)	WG #4	Tuesday, March 31

	orkgroup #4 – Address Policy Issues – ompensation	Who	Completed by
3.	Convene conference call to discuss next steps on compensation	Lin S. and John T. (co-chairs), Joe C., Amy F., Frank L., Joe M.	Wednesday, Dec. 31
4.	Issue RfP for consultant to research and write white paper on different formats of compensation (pending results of conference call)	Lin S. and John T. (co-chairs), Joe C., Amy F., Frank L., Joe M.	Wednesday, April 1
5.	Complete report on compensation (pending results of conference call)	Consultant	Sept/Oct 09 (for next CD meeting)

	orkgroup #5 – Increase USDA's Funding r Federal and State Efforts	Who	Completed by
6.	Draft lobbying 101 package and send to WG #5	Faith C., Ken R., Lin S., John T.	Wednesday, Nov. 26
7.	Finalize lobbying 101 package	WG #5	Friday, Dec. 12
8.	Work on draft messaging, success stories, and prioritization and send to WG #5	Frank L., Doug P., Anand P., Ashley W.	Friday, Dec. 19

9. Finalize messaging, success stories, and prioritization	WG #5 in coordination with WG #6	Friday, Jan. 16
10. Develop draft recommendations re: fire suppression funding and send to WG #5	Jake D., Caitlyn P.	Friday, Jan. 23
11. Finalize fire suppression recommendations	WG #5	Friday, Feb. 13
12. Expand upon visionary fund concept	Frank L.	By next CD meeting

C. Breakout Session: Communicate and Market Key Ideas about Protecting Forests

This breakout session was chaired by Keith Douce, University of Georgia, and Leigh Greenwood, TNC. The co-chairs reviewed the objective of Workgroup #6 (Communicate and Market Key Ideas about Protecting Forests), which is "to transform political and public opinion in order to seize opportunities." They informed the group that the Steering Committee had identified two key opportunities for the Workgroup in 2009 – creating a toolbox and an outreach guide – and invited the group's input on these ideas.

Describing the vision for the toolbox, the co-chairs explained that it is intended to serve as a clearinghouse of information for both professionals who are dealing with an infestation (or might in the future) and for interested members of the public. It would take a web-based "wiki" format, in which content can be constantly updated, although only authorized scholars would be permitted to add content (as opposed to an open wiki, such as Wikipedia).

Participants approved of the toolbox idea and volunteered a number of items that they could contribute. They made recommendations on important characteristics for the site, such as ease of use and well-defined areas for "professional" and "general" access. Group members also suggested elements to incorporate in the toolbox, including "readiness" guides, key contact people, and both sample documents and templates (in PDF and Word formats).

In response to the question of how to drive traffic to the site, several participants indicated that a well-designed, credible site will draw traffic. To that end, it is important to involve key researchers and keep the information on the site updated. One suggestion was to identify target groups for the site (zoning boards; plant boards; and township engineers, ecologists, and foresters) and send them letters of introduction. Participants also flagged copyright as a key issue for the Dialogue to consider in designing the wiki toolbox.

The co-chairs described the outreach guide as a tool which would give guidance and examples to professionals in the field on how to conduct outreach campaigns. Participants also indicated support for this idea and suggested possible content for the guide: how to employ mass marketing tools (such as PSAs); how to get involved with extension programs; how to "sell" your program; and a list of commonly asked questions from stakeholders. One participant mentioned that the ANLA/IA water resources outreach guide might serve as a good example.

Several participants volunteered to form a subgroup to develop proposals for the toolbox and the outreach guide and bring those back to the full Workgroup.

Workgroup #6 – Communicate and Market Key Ideas about Protecting Forests	Who	Completed by
13. Develop outlines/proposal for wiki toolbox and outreach guide and submit to WG #6	Jerry C., Keith D., Leigh G., Bob S., Susan S.	Wednesday, Dec. 31
 14. Submit materials to populate wiki toolbox o MN/MI DNR meeting notes o Overview PowerPoints o Fact sheets o Canadian EAB report o Fort Collins forest health technology risk mapping 	Perry C. Judy A. Tami S. Robert H.	Friday, Jan. 16
15. Ask speakers to develop case studies of their experiences to include in the toolbox?	Leigh G.	Pending development of outlines/proposal
16. Put wiki toolbox, including outreach guide, online	WG #6	Tuesday, March 31

D. Breakout Session: Engaging the Private Sector (Retail/Nursery Industry)

The breakout session began with two background presentations. Keith Douce, University of Georgia, shared a presentation describing the role of USDA's Cooperative State Research, Education, and Extension Service (CREES) and land grant universities, including their outreach, influence, and funding challenges. John Peter Thompson, ANLA, then delivered an overview presentation on the business of horticulture, or the green industry, including "food, fibers, feed, fuels, flowers, and forests."

Frank Lowenstein and John Peter Thompson described recent outreach to the retail sector, including a meeting with and a letter to the Retail Industry Leadership Association (RILA). As a next step to encouraging further collaboration between the Dialogue and RILA and its members, breakout participants discussed holding a call with Michael Chenard of Lowe's, and possibly sponsoring an intern to conduct interviews on views of "sustainability" as related to invasives.

There was also interest in engaging the nursery industry through CREES and land grant universities. In these activities, breakout participants noted it will be important to be clear that the focus is non-native forest insects and diseases, rather than a broader framing of invasives.

Workgroup #3 – Engage Private Groups in Forest Protection – Retail Industry	Who	Completed by
17. Speak with Dialogue retail participants to discuss motivations for retailers to get involved with Dialogue	Jake D., Amy F., Frank L., John T.	Wednesday, Dec. 31
18. Speak with RILA about the opportunity to have intern interview RILA/Dialogue on meaning of sustainability	Frank L., John T.	Wednesday, Dec. 31
19. Engage FSC & SFI on revised standards	Jake D.	Wednesday, Dec. 31
20. Document case studies to share with retailers	WG #3	Tuesday, March 31

Workgroup #3 – Engage Private Groups in Forest Protection – Nursery Industry	Who	Completed by
 21. Develop proposal to WG #3 addressing: How to engage extension (while staying on message); What information Dialogue would like from industry; Messages to nursery industry, land grant university administrations, CSREES, distributor networks, etc.; Recommendations on activities for nursery industry 	Keith D., Amy F., John T.	Tuesday, March 31
22. Consider proposal and determine next steps	WG #3	Thursday, April 30

E. Breakout Session: Don't Move Firewood

Leigh Greenwood, chair of the session, delineated the two major opportunities to be addressed in the session – promotion of the <u>Don't Move Firewood (DMF) website</u> and promotion of the "don't move firewood" message beyond the website.

First, she solicited the group's input on what can be done to encourage more people to visit the website. A participant raised the idea of creating a standard email introducing the website, which Dialogue participants and others could then forward to their contacts. A number of participants volunteered to disseminate information on the website to their contacts and constituents. Another suggested outreach technique was to create flyers to hang on doors. The group then generated a list of potential outreach targets: hunting, camping, and community-level blogs; firewood dealers; the NASCAR community; the Entomology Society of America and other professional organizations; sporting goods stores; hunting, fishing, and sporting magazines; and retailers of wood stoves.

In addition, participants made suggestions for enhancing the website's content, including providing alternative options for those who decide not to move firewood (which raises a legal obstacle in terms of the site's ability to endorse particular dealers), adding a section on firewood for home heating, and offering a list of questions for people to ask firewood dealers.

With regard to spreading the DMF message beyond the website, some group members offered to engage in specific outreach actions. As targets for outreach, they suggested Walmart, Lowe's, grocery stores, university athletic departments, and state departments of transportation. One participant mentioned the need to define firewood upfront in the messaging.

As a final item, Ms. Greenwood highlighted the importance of documenting and quantifying outreach efforts in order to determine their effectiveness. She encouraged all who engage in DMF outreach to report to her on their activities and to send her the results of any surveys conducted.

Do	n't	Move Firewood Workgroup	Who	Completed by
23.		llow up to encourage members to perform treach	Website Oversight Committee	ASAP and ongoing
24.	Pro	omote DMF website	Leigh G. coordinate	
	0	Create standard email announcing the website	Leigh G.	Early December
	0	Send email announcing website to potentially interested organizations and colleagues	Susan S., DMF WG members, CD members	Once draft email is circulated
	0	Work with state and regional campground associations	Judy A.	
	0	Work with outdoor columnists (e.g., magazines for hunting, fishing, sporting groups)	Doug P. & other DMF WG and CD members	
	0	Work with "adventure rangers" at state and national parks	Robert H.	
25.	dis	sseminate the DMF message and tribute materials (contact Leigh G. for terials)	Leigh G. coordinate	ASAP
	0	Trainings for foresters	Robert H.	
	0	Arbor Day ceremonies	David S.	
	0	Universities (e.g., Purdue)	Susan S.	
	0	Illinois DOT to post info at rest areas	Bob B.	
	0	Industry trade shows	Judy A.	

26. If your organization is interested in	CD members	Ongoing
supporting the DMF website, contact Leigh		
Greenwood (lgreenwood@tnc.org)		

F. Update on USDA Progress

David Kaplan of the USDA APHIS Plant Protection and Quarantine (PPQ) addressed the group over lunch to give an update on USDA's activities. Dr. Kaplan stated that APHIS is a regulatory agency that recognizes that not all solutions require regulations; rather, where possible, when rulemaking is not the most effective approach, APHIS will seek out stakeholders and other interested parties to consider alternative strategies. As an example, when Asiatic Soybean Rust was threatening the United States, APHIS, informed by risk assessment, provided leadership to coordinate activities amongst other USDA agencies such as the Agricultural Research Service and Cooperative State Research Education and Extension Service to align resources with industry in developing real-time reporting systems to provide early detection and guide industry response to this important plant pathogen. APHIS' authority is principally derived from the Plant Protection Act and it engages in notice and comment rulemaking which, for invasive species, is often an evolutionary process since we continue to learn more about them as we interact with them in North America. The process is transparent until the agency enters into ex parte. According to Dr. Kaplan, an oft-raised question on rulemaking is the length of time involved in the process. APHIS is working toward the development of "smart rules," such as the rulemaking on Q-37, which are intended to be more performance-based and streamlined than in the past.

Mr. Kaplan then delivered a series of updates on key USDA actions on invasive pests and other issues of interest to the Dialogue:

- Asian Longhorned Beetle (ALB) A federal domestic quarantine order was issued on November 10 to cover the area of Worcester, Massachusetts. The infestation is estimated to be at least ten years old. APHIS is working to address the infestation by expanding the quarantine as needed to prevent the movement of materials out the area, which could cause further spread. APHIS is working with the state on a proposed budget for the program, expecting the money would come from the Commodity Credit Corporation (CCC). Dr. Kaplan added that he believes ALB can be eradicated, provided resources are made available and the community wants to see it through.
- Emerald Ash Borer (EAB) 183,000 square miles are currently quarantined for EAB, and Dr. Kaplan asserted that eradication is no longer possible in North America. APHIS is instead focusing on how to limit the long distance spread through firewood, wood products, etc. They hope that continued investments in research will pay off and eventually we will have better tools to combat this highly destructive pest.
- **Gypsy Moth** Domestic quarantine orders have been issued for infected counties. There is a new heat treatment protocol that aims to mitigate the risk of transporting the pest through firewood.
- Light Brown Apple Moth (LBAM)—Regulations are in place to prevent its spread through trade activities. In the search for "soft solutions," APHIS came up with a treatment involving aerial applications of pheromones. The treatment encountered local opposition, however, and there are currently injunctions in two California counties against aerial applications. LBAM was detected relatively early after its introduction into the United

States. LBAM populations continue to increase; however, they are still significantly lower than those associated with significant plant damage in other countries. Federal and California regulations have prevented movement to other portions of California and to other states and trading partners. APHIS is conducting national surveys for LBAM and thus far it has not been detected elsewhere. APHIS continues to seek alternate strategies to address this invasive pest.

- **Sudden Oak Death** *Phytophthora ramorum* is a significant problem in the Northwest. APHIS has regulations to address high-risk pathways for long-distance spread. Working closely with states, the USFS and the scientific research community at large, APHIS wants to better understand principles and practices in order to prevent further spread. APHIS will finalize the February 2006 interim rule and has received a number of comments on it.
- **Sirex Woodwasp** This pest seems to produce varying levels of damage depending on the region where it occurs. APHIS is focusing on biocontrol options and is presently conducting controlled releases. Dr. Kaplan acknowledged that there are concerns about impacts of biological control agents on other Sirex species and asserted that APHIS is addressing them.
- Wood Packaging Materials Dr. Kaplan believes that the domestic rule is going to move, but that the process will take time. The risk analysis for domestic wood packaging is currently under development. APHIS is holding discussions with the pallet industry in order to understand the implications of regulation. The current analysis includes principles used under ISPM 15 and the pooled pallet industry.
- **Firewood** APHIS is conducting a risk assessment on firewood to determine the challenges of addressing this issue on a national scale. The agency has not yet decided about implementing a national firewood regulation or certification program. Given the diversity of the producers and users of firewood, it is unclear whether regulations are feasible. APHIS has issued a federal order prohibiting the importation of Canadian firewood unless it has been heat-treated. APHIS is highly supportive of outreach and local activities to raise public awareness on this important issue.
- Q-37 APHIS is developing a "smart rule" for living plants and plant materials. The rule is seen as a priority for this administration, and revisions to the rule are currently undergoing departmental review. It will be released soon with a 60-day comment period.
- **Q-56** The rule focusing on fruits and vegetables was revised in July of 2007 and the process is moving forward.
- **Funding** APHIS funding is currently under continuing resolution.
- Farm Bill There is now a Farm Bill section on the APHIS PPQ website. Funding is set to increase over the next several years, and there is no language in the current bill to turn off the funding flow after 2011, unless Congress decides to change it.

Dr. Kaplan concluded his presentation with an overview of the six key areas of focus for USDA APHIS:

- Enhanced analysis and surveys to identify pathways of entry
- Support for increased inspections
- Support and training for pest identification and technology
- Safeguarding nursery production
- Outreach and education to the industry and public
- Rapid response funding (from a source other than the CCC)

After his presentation, the audience posed a few questions and Dr. Kaplan responded as follows:

• Opposition to LBAM treatment: Dr. Kaplan observed that there are a number of forces at play in California, and the local reaction to the aerial treatment demonstrates the importance of skillful communication and outreach. This is a case of early detection and rapid response, so although the pest is visible, the damage incurred is not because it is too early for this particular pest to cause dramatic effects on plants and crops; it is difficult to convey the message of risk associated with this pest or for many other invasive species early after its entry into the United States. This discrepancy is a major factor in the ongoing opposition, as the public is not witnessing defoliation or damage to landscapes firsthand. The LBAM populations are building and it is anticipated that if mitigations do not occur, damage will become apparent.

• Addressing gaps between invasive species and trade: As APHIS PPQ regularly deals with the consequences when prevention efforts are inadequate to prevent invasive pests from entering the United States, Dr. Kaplan recognized that it would be useful for all trade agreements to consider invasive species; conditions could be established to alleviate introduction of invasive pests as a part of all agreements.

IV. Summary and Additional Next Steps

On returning from the breakout sessions, the breakout groups gave brief summaries of the results of the sessions. The full group then discussed next steps for the Dialogue, which are summarized in the table below (please note the next steps were further refined in a Steering Committee meeting that immediately followed the Dialogue meeting).

At the conclusion of the meeting, Frank Lowenstein invited participants to do three things:

- 1) promote the <u>DMF website</u> within their organizations;
- 2) contribute to the blog on the DMF website; and
- 3) suggest relevant items for the newsletter that will be issued in December.

He added that Leigh Greenwood (lgreenwood@tnc.org) is the contact for all these action items. He then drew the meeting to a close by thanking the participants for their time and their engagement in the Dialogue.

Workgroup #1 – Prevent Introduction of New Pests and Diseases	Who	Completed by
27. Convene conference call to discuss actions needed (e.g., generating more letters, obtaining press coverage)	Q37 signatories	ASAP

Workgroup #2 – Limit the Spread of Pests and Diseases in the US	Who	Completed by
28. Track movement on solid wood packaging rulemaking and be prepared to respond when ANPR issued	WG #2	Ongoing
29. Track PBQ activity on biocontrol and consider responding as needed	WG #2	Ongoing
30. Explore potential regulatory and non-regulatory approaches at federal and state level to prevent interstate firewood movement and, if applicable, develop proposal to WG #4	Michael B., Anand P., Ken R., Carl S.,	Tuesday, March 31
31. Review firewood proposal and decide on next steps (pending above discussion)	WG #4	Thursday, April 30

Transition Package	Who	Completed by
32. Send transition letter out to full CD to solicit signatures	Transition WG	Thursday, Nov. 20
33. Indicate support for and willingness to sign on to transition letter	CD Members	Tuesday, Dec. 2
34. Develop fact sheet on the benefits of forests for inclusion in transition package	Nadine B., Ken R., Michael B., Faith C.	Friday, Dec. 5
35. Send transition package to transition team	Transition WG	Mon, Dec. 15 (tentative, TBD by Transition WG)

Miscellaneous	Who	Completed by
36. Look into legal implications of expanding newsletter list without expanding CD list	TNC staff	Wednesday, Dec. 10
37. Produce and circulate CD newsletter	Leigh G.	Friday, Dec. 12
38. Send out newsletter to relevant listservs with introductory cover email informing people how to subscribe to the newsletter	Ken R., Carl S. (and anyone else on SC)	When newsletter is issued

39. Work on developing Invasive Species Caucus in the House of Representatives	Steven M., John T.	Ongoing (six months to a year)
40. Consider commenting on Sustainable Sites' draft guidelines for certification	Steering Committee	TBD

November Dialogue – Meeting Follow-up	Who	Completed by
41. Check with speakers on posting their presentations online	RESOLVE	ASAP
42. Post presentations online and email meeting attendees	RESOLVE	Wednesday, Dec. 15
43. Distribute final meeting summary to full Dialogue	RESOLVE	Friday, Jan. 9