PLAN TO ACHIEVE GOAL OF THE SOCIAL/ENVIRONMENTAL COMPONENT OF THE FHI

Working Goal: Within three years develop broad social and environmental stakeholder understanding on how biotechnology may be used to preserve and restore forest health.

Plan Summary: The detailed plan below describes how the Social/Environmental Group (SEG) intends to achieve the above goal as part of the Forest Health Initiative (FHI) goal of exploring how biotechnology may be used to address current and emerging forest health threats. The overall plan begins with the inaugural meeting of the FHI in January 2009 and extends through the possible planting of the first American chestnut developed as part of the FHI program and its partners in 2012. The detailed plan is divided into two parts: the first 2009 through early 2010, then early 2010 into 2012. The plan does not focus exclusively on the American chestnut; rather it recognizes that this species serves as a case study for exploring how biotechnology may be used to preserve and restore forest health.

Much like the broader FHI, the SEG will embark on a three-pronged, parallel and fully coordinated (braided) approach to achieving its goal. Three Work Groups of the SEG will be established as follows:

• Issues Work Group: addressing key questions, issues and concerns by stakeholders.
• Principles Work Group: indentifying and integrating principles for responsible deployment of biotechnology to address current and emerging forest health threats.
• Outreach & Communications Work Group: developing and executing a plan to solicit broad input and engage key stakeholders that result in broad stakeholder understanding and acceptance of the FHI.

Each SEG Work Group will develop its own plan for addressing its objectives, all coordinated through the full SEG. All SEG Work Groups will be open to additional constructive participation by any stakeholder and will actively seek to expand the points of contact throughout the FHI process. The SEG will ensure coordination with the Science and Regulatory arms of the FHI and approval of the Steering Committee throughout the process. Participation by the Science and Regulatory arms of the FHI in the efforts of the SEG Work Groups will be critical to success.
Timetable Overview:

1. *Organize Social/Environmental Group (SEG).* By May 2009, identify and confirm members of the SEG.

2. *SEG Identifies Key Questions and Issues; Goal; and Framework Plan.* By June 2009, conduct the first meeting of the SEG to discuss questions, issues and next steps, including outreach to other stakeholders.

3. *SEG Submits Plan to Achieve Goal.* By mid-August SEG submits plan, including organization of Work Groups, to Steering Committee for approval.

4. *SEG Presents Work to All Members of FHI.* By February 2010 SEG and its Work Groups meet with FHI Science Group, FHI Regulatory Group and FHI Steering Committee to present and discuss:
   - Answers to key questions, issues and concerns where information exists to address each.
   - A plan for addressing key questions, issues and concerns where information does not currently exist.
   - A draft set of high-level principles for responsibly deploying biotechnology.
   - An Outreach and Communications Plan.

5. *SEG Implements and Refines Work Group Efforts.* The SEG will ensure thorough coordination between its work groups and with the FHI Science and Regulatory groups. The SEG will plan on a meeting early in both 2011 and 2012 with the FHI Science Group, FHI Regulatory Group and FHI Steering Committee to discuss progress, refinements and seek approvals if appropriate.


Detailed Plan/Timetable:

**Short-term: 2009 – early 2010**

1. Conduct multi-stakeholder meeting to formally introduce and discuss the Forest Health Initiative (FHI) and seek ideas for pathways forward.

2. Develop a preliminary plan, timetable and budget for Steering Committee approval for the social/environmental component of the FHI to achieve its goal.

3. Develop a list of recommended participants for first Social/Environmental Group (SEG) meeting for the Steering Committee to consider. *note: this will be an iterative process as additional logical groups to add will emerge as part of the process.*
4. Contact each organization recommended for participation that was not in attendance at 1/09 session, to brief them on FHI and solicit their views and participation.

5. Conduct first face-to-face exploratory meeting of the potential participants in the SEG to:
   • Achieve common understanding of the goals, processes and management of the Forest Health Initiative (FHI).
   • Identify the range of perspectives, issues and concerns on the use of biotechnology to address forest health challenges.
   • Agree on the goal of the Social/Environmental Group.
   • Agree on a framework plan and next steps to achieve this goal.
   • Identify other organizations that should be represented on the FHI SEG (see attached).

6. First draft of plan to achieve SEG goal circulated to SEG members.

7. First draft of individuals to populate and objectives for the following three Work Groups:
   • Issues Work Group: addressing key questions, issues and concerns.
   • Principles Work Group: identify and integrate principles for responsible deployment of biotechnology to address current and emerging forest health threats.
   • Outreach & Communications Work Group: developing and executing a plan to solicit broad input and engage key stakeholders. *Note: outreach is an ongoing activity.*

8. Submit recommended SEG plan to FHI Steering Committee for approval.

9. Conduct conference calls of Work Groups to develop work plans for each.

10. Full SEG reviews and refines by conference call the work to date and plans of each of the Work Groups.

2010

1. SEG and its Work Groups meet with FHI Science Group, FHI Regulatory Group and FHI Steering Committee to present and discuss:
   • Answers to key questions, issues and concerns where information exists to address each.
   • A plan for addressing key questions, issues and concerns where information does not currently exist.
   • A plan to identify and implement principles for responsible deployment of biotechnology to address current and emerging forest health threats.
   • An Outreach and Communications Plan.

2. Steering Committee responds to plans and associated costs.
**Longer-term:** Early 2010 – 2012 tree planting

The *Issues Work Group* launches its plan for addressing key questions, issues and concerns where information does not currently exist. The ongoing results are fed into the Outreach and Communications Work Group for integration into its plan.

The *Principles Work Group* works to identify a set of draft principles to generate broad stakeholder discussion for Steering Committee approval by June 2010. The Principles Work Group coordinates with the Outreach and Communications Work Group to solicit broad stakeholder input. The Principles Work Group continually makes refinements based on stakeholder input and parallel programs for Steering Committee approval of the operational principles in early 2011.

The *Outreach and Communications Work Group* launches its plan. The feedback generated from stakeholders is directed to the Issues or Principles Work Groups as appropriate. The Outreach and Communications plan will be subject to continuous updates and refinement.

The *SEG* will meet as a whole and will include representatives from the FHI Regulatory and Science Groups to ensure full coordination of all the groups -- likely two times a year with conference calls being the preference.

The *SEG* will plan on a meeting early in both 2011 and 2012 with the FHI Science Group, FHI Regulatory Group and FHI Steering Committee to discuss progress, refinements and seek appropriate approvals.
SEG Work Groups

The SEG will embark on a three-pronged, parallel and fully coordinated (braided) approach to achieving its goal. Each SEG Work Group will develop its own plan for addressing its objectives, all coordinated through the full SEG. The SEG will ensure coordination with the Science and Regulatory arms of the FHI and approval of the Steering Committee throughout the process. Participation by the Science and Regulatory arms of the FHI in the efforts of the SEG Work Groups will be critical to success. What follows is an initial description of the objectives and areas to address based on discussion at the June meeting, together with assignments for populating each of the three Work Groups.

Issues Work Group

Objectives:

- Develop answers to key questions, issues and concerns raised by stakeholders where information exists to address each.
- Develop and execute a plan for addressing key questions, issues and concerns raised by stakeholders where information does not currently exist (including indentifying associated costs to develop the information); and
- Providing answers to issues raised in the process of the Outreach & Communications Work Group deploying their plan.

SEG Participants:
Anne Law – American Bird Conservancy
Maud Hinchee – ArborGen
Susan McCord – Institute of Forest Biotechnology
Doug Williams – Association of Consulting Foresters
Steve Strauss – Oregon State University
Leila Pinchot – Pinchot Institute
Tom Franklin – Theodore Roosevelt Conservation Partnership
Dana Nelson – USDA-Forest Service

Initial questions, issues, concerns from June SEG meeting:

Information exists

How will the following be addressed in the use of biotechnology:

- Alleopathy;
- Invasiveness;
- Genetic diversity;
- For species like the American chestnut, capturing as much native diversity as possible (the intersection of invasiveness and genetic diversity);
- Genetic migration; and
- Physical expressions?
Information does not readily exist

How will the following be addressed in the use of biotechnology:

- Consequences;
  - unintended based on what we don’t know;
  - unintended based on what we thought we knew; and
  - unintended based on intended performance.
- Ecological dynamics; and
- A restoration plan?

Principles Work Group

Objectives:

- Establish a set of principles for safely and responsibly deploying biotechnology that will be adopted by the FHI by:
  - Understanding and using existing principles, protocol and practices for deployment of biotechnology;
  - Addressing issues raised in the process of the Outreach & Communications Work Group deploying their plan; and
  - Vetting draft principles to seek broad stakeholder support and understanding.
  - Putting into practice a set of principles for the FHI.

SEG Participants:

Bob Simpson – American Forest Foundation
Kim LaDuke – Forest Guild
Brendan Davis – Forest Landowners Association
Adam Costanza – Institute of Forest Biotechnology
Randy Dye – National Association of State Foresters
Al Sample – Pinchot Institute
Roger Sedjo – Resources for the Future
Paul Trianosky – The Nature Conservancy

Initial questions, issues, concerns from June SEG meeting:
See items under Issues and Outreach & Communications Work Groups.

Outreach & Communications Work Group

Objectives:

- Develop and execute a plan to solicit broad input, engaging key stakeholders that produces broad stakeholder understanding and acceptance of FHI, specifically:
  - Secure additional participation in SEG by targeted groups;
  - Inform of and discuss FHI with targeted organizations; and
  - Solicit additional questions and issues from broad range of stakeholders.
- Identify the range of costs associated with communicating the FHI to target audiences.
- Ensure information developed by Issues Work Group is transferred to key stakeholders in a form they can understand.
SEG Participants:
Jake Reilly – American Forests
Lori Knowles – Health Law Institute
David Ledford – Rocky Mountain Elk Foundation
Drew Kershen – Oklahoma State University
Pat Layton – Society of American Foresters
Bryan Burhans – The American Chestnut Foundation
Brian Dangler – The Conservation Fund
Ralph Thier – National Association of Conservation Districts
Jay Farrell – National Association of State Foresters
Wes Nettleton – USDA-Forest Service

Initial ideas raised at the June SEG meeting:

Transfer and exchange of information
How will the following be addressed with social and environmental stakeholders:

- All of the questions where information exists and does not readily exist;
- Objections to willful human intervention in the natural system;
- Concerns about “rogue” genes;
- Personal health issues related to food derived from biotech trees;
- Concerns related to “frankentrees” or “super” trees;
- Restoring regional heritage;
- Creating value for landowners and local communities throughout the value chain;
- Use of case study to serve as a catalyst for discussion within and among stakeholders; and
- Ensure honest communications?

Participants in the June meeting agreed that solutions to the questions above include: early development of a communications plan; developing issue responses; transparency in the FHI process; and participatory research.

Additional Organizations to Participate in SEG
Provided they can commit to working towards the goal of the FHI SEG or constructive engagement, participants identified the following organizations that should be invited to add to participate in the SEG (names following can provide introduction/contacts):

- National Park Service
- Wildlife Management Institute
- Native Americans
- Appalachian Regional Reforestation Initiative
- Union of Concerned Scientists
- Southern Environmental Law Center
- Mountain Association for Community Economic Development
- Defenders of Wildlife
- Land Trust Alliance or similar organization
- Forest Stewardship Council
Organizations to Inform of and Discuss FHI
Participants identified the following organizations to inform of the FHI and seek their input:

- American Chestnut Cooperators Foundation;
- Appalachian Regional Commission;
- Trout Unlimited;
- Mining Organizations;
- Arbor Day Foundation;
- Sierra Club and other ENGOs;
- State wildlife agencies;
- Forestry and wildlife school deans;
- Appalachian Mountain Club;
- Appalachian Trail Association;
- Girl & Boy Scouts;
- Hardwood Associations (e.g. HLMA, HMA, AHEC);
- Southern Appalachian Forest Coalition;
- Nutgrowers Association;
- EU and other international bodies.