**Conewago Creek Initiative
Environmental Markets Team Meeting**

**December 15, 2010**

**Dauphin County Agriculture and Natural Resources Center**

 **Minutes**

**Attending:**

Ann Roda, DEP
Matt Royer, PSU
Jim Shortle, PSU
Hongyun Han, PSU
Kristen Saacke Blunk, PSU
Susan Marquart, NRCS

**Review of NFWF Work Plan and Previous Conference Calls**

Matt reviewed EM related deliverables in work plan and Ann reviewed previous conference calls of team. Calls focused on the need to develop a baseline of practices on the ground in the watershed and the ecosystems services offered by these practices. Also discussed was the need for an accounting framework for ecosystem services and a calculator to determine potential for credits.

**ERM 496 Independent Study**

Jim is teaching an independent study class spring 2011 semester with several senior level students. Focus is on farmer community engagement, and students will be working on two main projects. First, they will be helping a graduate student to run an experiment where farmers will consider scenarios relating to making decisions about participating in payments for ecosystems services. Experiments will be county based, and include farm focus groups in Dauphin, Lancaster, and Lebanon Counties among others. Extension educators in each county will recruit farmers, and students will help run experiment. Results of experiment could help frame tool development and outreach methods in the Conewago and beyond.

The second project students will be engaged in will be the development of educational/outreach materials on ecosystem services for use in the Conewago Initiative. These tools might include fact sheets transformed into brochures with photos and graphics, video pieces, materials for website, and development of a farm template that allows a farm landowner to assess his/her land for ecosystem service potential.

Conewago tools will be the latter half of the class. Jim to line up time to meet with EM Team when students are ready to turn to this part of the project.

**Work Products from Initiative**

Several work products were discussed as needed from the Initiative to meet the goals of the EM part of the project. They are listed below, with a discussion of how best to deliver each.

1. Outreach and education materials (what ecosystem services are and how they may relate to community based efforts and market based opportunities).

Penn State students can take the first steps to develop these in ERM 496 class. A Penn State graduate student did develop some written modules that are at the basic level and require some fine tuning and drill down, but could be a good starting point. Kristen has copies of modules and will share with the team. Need to also include urban practices, not just ag. Stuart Echols’ website on Artful Rainwater Design is good for awareness and literacy of urban green infrastructure practices.

There is a need to develop a catalog of all incentives for practices (beyond just environmental markets). NRCS has a start of this, with a catalog they’ve developed on all NRCS funded programs. Catalog would educate landowners on opportunities. Who is the intended user of the catalog, landowners or ag technician? Perhaps this is something that could be developed for Conewago website.

The catalog could be organized a couple different ways. One would be payment types: easements (payment for loss of private return); cost sharing (positive private benefit, help with financing implementation); and trading (assumed no private benefits, no need to price these to make it economically affordable).

Case study approach could be taken, with case studies highlighted in materials for farm, forest, backyard, and business.

1. Quantification of market-based and other relevant ecosystem services

There are tools being developed out there by others, including USDA Office of Ecosystem Services, Pinchot Institute (Bay Bank), and NRCS nutrients. We should invite tool developers to future EM Team meetings. Susan to check with USDA OES and try to get them to present at our February meeting. Perhaps multiple potential users of system could be invited to beta test, including farmers, ag technicians.

Urban stormwater management practices should also be a piece of this.

1. Technical assistance to landowners interested in participating in markets

Some aggregators exist out there to assist landowners interested in trading, such as Red Barn. Also Capital RC&D has developed worksheets that allow farmers to determine whether they can get credit for no till practices, and will act as aggregator of no till credits. Nutrient net is available to make preliminary assessment of nutrient trading opportunities. This will need to be further developed once outreach and quantification tools develop.

**Other**

Potential for “conglomeration bonus” exists in some incentive programs/environmental markets (i.e., extra payments if two or more adjacent landowners get together to implement practices. (This came up in discussion of promoting cooperatives as mentioned in work plan). Potential exists for participation from several large adjacent landowners from Route 230 to upstream of Koser Road (“Heart of the Conewago”). Approach to small landowners in this area might also be worthwhile, to achieve whole community involvement in restoration.

The tools needed exist. The delivery is suboptimal, and that is what this Initiative should focus on.

Potential for some sort of field event exists, and might be a good way to communicate what a farm template might look like. Could be of help to students in building the farm template, and would offer a field education component for students. Hess farm would be an excellent location for this field work.

**Next Meeting**

Matt will work with Ann and Susan to schedule next meeting in February. Susan to host at NRCS, with invitation to USDA OES. EM Team will begin meeting once every two months in 2011.