

Nutrient Trading Program Notes
January 22, 2016 Meeting
10:00 AM – 2:55 PM

Agenda

1. Introductions
2. Review of Notes from November 20, 2015 Meeting
3. Baselines and Eligibility of Practices, Nonpoint Source Workgroup (See Power Point)
4. Structure, Tools and potential Clearinghouse
 - a. MoSWIMS and NTT for NPS practices/actions (See Power Point)
 - b. Possible Clearinghouse structure (See Power Point)
 - c. Credit lifespan
 - d. Department thoughts on some elements
 1. Basin scale trading
 2. Attenuation options
 3. Limit eligible chemical species to start
 - e. Suggested framework and where elements might fit
 - f. Discussion
5. Path Forward
 - a. Memorializing decisions
 - b. Finalizing the decision needed
 - c. Writing the document
6. Summary of Today's meeting
 - a. Areas of Agreement and remaining disagreement
 - b. Tasks and assignments
 - c. Expectations
7. Future Meetings and Tentative Topics
 - February 26th
 - Market structures and transaction mechanisms
 - Role and responsibilities
 - Incentive approach (Rewarding early implementation)
 - Trading Ratios

1. Each member of the group introduced him or herself.
2. No comments were offered on the notes from the November meeting.
3. Darrick Steen provided an overview of the options that the non-point source group considered for baseline conditions and eligibility of practices. His presentation is summarized on the power point presentation. The group suggested starting on production agricultural lands initially. They also support using the current conditions as the initial baseline to ease entry for famers into trading with the idea that a trading program could raise the baseline in their watershed in the future. The requirement of a conservation plan as a baseline measure was also discussed, but not endorsed by the group. During the discussion it was pointed out that conservation plans, are mandatory for those engaged in NRCS and SWCP programs, but not all elements of the conservation plan are required to be implemented.

The group endorsed starting with accepted practices where a water quality values existed in NTT as a starting point with practices eligible to be added at any time as NTT values become known or the efficacy of the practice can be estimated.

The group also accepted the use of federal and state cost share as a potential basis for a trading program.

4a. Kurt Boeckmann presented a summary of current capabilities within the Soil and Water Program. The Missouri Soil and Water Information Management System (MoSWIMS) tracks all financial transactions for the program and is used by both district employees in every county and those in the SWCP in the department. It is not available for use by the public, but could be used for trading through a clearinghouse function by the establishment of a separate project in the system to track trading-related funds.

The Nutrient Tracking Tool is currently being calibrated to Missouri soil types and conditions. It can model the nitrogen, phosphorus and soil loss reductions that are achieved by a practice or multiple sets of practices. This would allow trading to occur without the need to measure results of practices at the edge of each field, making trading more economically viable. NRCS, together with other USDA agencies, is currently working to develop a version of NTT for national use.

4b. Joe Boland presented a brief overview of EI ERA's current role and a high level view of what services a clearinghouse might provide. The clearinghouse would be based on the use of existing infrastructure (MoSWIMS and NTT). He suggested a model in which part or all water quality credits earned by practices paid for through Missouri's Parks, Soil and Water Tax would be held by the clearinghouse and then sold within approved trading programs. The amount available could correspond to all of the practice, the SWCP program share of the cost share (75%), or the producers share (25%). Other options are possible as well. The money paid for those credits by the buyer would then be reinvested in the trading area where they would fund additional water quality improvements. These funds could help pay for more extensive implementation of the approved NRCS and SWCP practices, additional practices with known water quality benefits, not in one of either of those programs (such as wetlands, streambank stabilization, etc.), or, potentially other projects that would address the water quality goal of the trading program.

4c. Joe Engeln presented a general department proposal for the lifespan of credits. For practices with a one-year effective period, the credits earned as a result of that practice would be eligible for sale in the year that the practice was in place and one additional year before retirement. Practices that produce water quality benefits for multiple years would have credits earned in each year available for sale in the year of implementation and two subsequent years before retirement. (Thus for a practice with a 10-year contract in the SWCP, the first year's water quality benefit would be eligible for trading in years 1, 2 and 3. The last year's benefit would be available in years 10, 11, and 12.)

The group discussed some practices that might not warrant full credit immediately and the more general phase out of practices. This topic will be discussed and decisions sought during the February meeting.

4d. Joe Engeln offered the reasoning behind and how a trading proposal could focus on a basin approach to defining the trading area. The goal is to focus on the water quality goals while allowing flexibility to fit very different situations (local vs larger riverine systems). Trading proposals should be based on a watershed approach tied to water quality driver. The watershed size and whether trading will include an entire basin should be determined by the entity proposing to trade based on the water quality conditions and how best to meet the water quality goals of the individual trading program. Removing the impairment of local water body segment might provide a very good water quality target for a trading program in which the trading area is defined as the watershed upstream of and including that segment.

Each trading program will need to define a measuring point at which all credits will be determined. This point will define the downstream end of the trading program area.

These options will be discussed and the range of options should be determined at the February meeting.

Joe presented a few options for addressing attenuation within a trading proposal. The department could support any of these and is open to allowing the option of allowing each trading program to choose one of them. The first option would be to use the USGS values or those from other trading systems already in operation. The second would be to set a value for attenuation within the trading ratio, based on the characteristics of the trading area selected. The third option would provide for the use of attenuation ratios based on the relative positions of the buyer and seller within the watershed. The first and third options would likely require the development of (or possible borrowing of) a GIS-based system using stream network and know attenuation values form other sources, such as the USGS.

Joe also suggested limiting the chemical species eligible for trading to those with well-estimated attenuation values. This would allow the department to support trading while not limiting the species of greatest interest to those involved in these discussions.

He pointed out that the combination of well-defined basins (trading areas) and limited species for trading helps limit uncertainty and thus trading ratios. Trading ratios would be tied to trading area extent and structure and practice failure risk.

These topics will be discussed with decisions planned for the February meeting.

4e. The outline of the framework was discussed. Here is an edited version based on the discussion at the meeting and subsequent thoughts of Joe Engeln.

1. Goals and Use of this Framework
2. Definitions
3. Common Infrastructure available
 - a. Missouri Soil and Water Information System (MoSWIMS)
 - b. Nutrient Tracking Tool (NTT)
 - c. Clearinghouse
 - d. Attenuation Modeling and Consultation
4. Elective Elements of a Trading Proposal (including those that could be carried out through the clearinghouse)
 - a. Trading Goals (Water Quality Goal) – Element #1
 - b. Trading Area – Element #2
 - c. Trading Type – Element #3
 - d. Species to be Traded – Element #4
 - e. Monitoring – Element #5
 - f. Baseline Performance - Element #6
 - g. Liability - Element #10 ***
 - h. Tracking of Credits - Element #11 ***
 - i. Enforcement of Conditions of Individual Trades - Element #12 ***
 - j. Trading Ratios – Element #13 ****

*** - could be addressed through the use of the clearinghouse
5. Uniform (statewide) Elements of a Trading Proposal
 - a. Time Terms of Trades – Element #7
 - b. Trading Margin – Element #8
 - c. Extreme Events - Element #9
6. References

4f. The discussion showed general support for many of the ideas presented and the proposed outline; however, the group did express an interest in having some time to think through these topics. Multiple questioned revealed places where some doubts remain or where additional details are needed to gain support. Joe promised to share the outline and summary information for the topics discussed promptly to provide everyone with time to consider these topics in advance of the February meeting.

5. Joe noted that we would revisit these topics in February to get to conclusions. He has begun writing and plans to share some parts of the Framework in early draft form at least one week before the February meeting to give participants a chance to see how the document might look and to voice early opinions on its organization and approach.
6. Joe asked members of the group to consider taking on one or more of these roles as we try to complete the framework to get it finalized in the fall.
 - a. Topic leader – A person with expertise in the field to help guide the drafting a section of the document.
 - b. Writer – A person who would write a section based on their knowledge of a trading proposals element or other part of the document.

- c. Dedicated editor – An individual who would do a thorough review to the document content, grammar, etc.
- d. Sounding board – A person who would review the document for tone, clarity, etc. but not for details such as grammar.

7. Draft of the agenda for the next meeting and schedule of future meeting

1. Agenda for February 29 meeting
 - a. Introductions
 - b. Review of Notes from January 22, 2016 Meetings
 - c. Review of proposed outline and categories of elements
 - d. Discussion and decisions
 - i. Clearinghouse format
 - ii. Use of SWCP practices as leverage
 - iii. Basin scale trading
 - iv. Attenuation options
 - v. Eligible species (to start)
 - e. Initial impressions on written portions of the framework
 - f. Trading Ratios
 - g. Role of Ecosystem Services in Crediting (and potential approach to credit pricing)
 - h. Adaptive management
 - i. Current Status of Framework
 - Market structures and transaction mechanisms**
 - Role and responsibilities**
 - Funding the clearinghouse and other roles**
 - Extreme Events**
 - Trading Ratios **
 - Role of Ecosystem Services in crediting
 - Adaptive Management (Revisiting)
 - j. To Do list
 - k. Summary of Today's meeting
 - l. Future Meetings and Tentative Topics

March 11

- Review of decisions
- Progress report on the framework completion
- Comments on partial first draft of framework

April 29

- Discuss framework draft

June – Draft to public for comments

July – Public hearing at the Clean Water Commission meeting

October – Anticipated approval of framework by the Clean Water Commission