Final
August 2013

Fox P Trade Workplan

Introduction

This workplan responds to and builds on specifics identified in the Cooperative Agreement between the USDA-NRCS and the Great Lakes Commission (GLC) to establish a water quality trading program focused on phosphorus for the Lower Fox River Watershed (LFRW). The effort is being implemented through a project called *Fox P Trade*. Additional tasks and deliverables have been guided by *In It Together, A How-To Reference for Building Nonpoint Water Quality Trading Programs* (Willamette Partnership, 2012) and consultations with the Wisconsin NRCS staff (NRCS), the Wisconsin Department of Natural Resources staff (WDNR), and other stakeholders. Tasks are described below and reflected in a timeline in Table 1.

1. Manage Project and Reporting

The GLC will provide administrative support and oversight for the project and maintain regular contact with the NRCS, WDNR, and other project partners throughout the project year. The GLC will assign a project manager who will provide administrative and technical leadership on all aspects of the project. The GLC will submit all necessary documents for quarterly reports to the NRCS within 30 days of the end of each federal fiscal quarter. A final report will also be developed and submitted at the time the final billing is submitted to NRCS.

Deliverables: Monthly conference calls will be held with the PMT (NRCS, GLC and WI DNR). Quarterly reports will be submitted to the NRCS within 30 days of the end of each federal fiscal quarter. A final report will be submitted at the end of the project.

Timeline: This task will be accomplished during each project quarter of each project year, with the final report submitted at the end of the project (Table 1).

2. Develop Project Workplan to Achieve a Project-Specific Water Quality Goal

The TMDL for the LFRW establishes instream phosphorus water quality targets. Wisconsin Water Quality Trading Guidance establishes discharge limits as the compliance goal. The LFRW and Lower Green Bay TMDL uses statewide numeric instream water quality criteria targets to determine permit effluent/discharge limits. The differences between achieving instream criteria and permit limits are reconciled through the TMDL and will be leveraged to support this project goal. However a common statement that reflects shared goals for this project will be important to ensure stakeholder participation throughout the project. This task involves an iterative process that engages the Project Management Team (PMT) and key stakeholders to develop a project goal statement that recognizes these compliance goals and the regulatory and policy drivers supporting them. The task will result in a project goal that can be used to measure progress and success. The following statement will be used as

the starting point for discussion: *The goal of this project is to establish a phosphorus trading program where trades are enabled by a combination of approaches (driven by TMDL allocations) that reflect the overall purpose of improving instream water quality in the Lower Fox River Watershed.* Completion of this task will involve partial implementation of Task 3 (Convening Stakeholders) since it will involve iterative discussions with project partners and possibly other stakeholders.

Deliverable: Revised detailed project workplan covering tasks, deliverables, and timing for the entire project year.

Timeline: This task will be accomplished during the first project year(Table 1).

3. Develop Project Structure and Convene Stakeholders

There are many stakeholders that have been working to address water quality issues in the LFRW and surrounding watersheds for decades. This task involves developing a structure that will effectively engage all partners in a way that can maximize the contributions of various interests and leverage past and ongoing efforts.

The project structure will particularly leverage the driving partnership between the USDA-NRCS and the GLC and the key role of the Wisconsin Department of Natural Resources (WDNR). These entities will be part of a PMT that will provide input and feedback on all tasks. A multi-tiered structure will be sought to maximize efficiencies and ensure inclusiveness at the appropriate levels. Periodic convenings will occur with each committee or workgroup, via conference call, webinar, or in-person meetings. A project Field Coordinator will be secured to support this project task. Project partners involved in specific tasks shall be convened more frequently while those in an advisory capacity shall be consulted on a periodic basis. Convenings shall be designed to achieve the following:

- Build direct relationships between buyers and sellers
- Enable the regulated community and unregulated community to have candid conversations about their goals for the watershed and incentives and disincentives to achieve those goals
- Safeguard the interests of those not directly involved in the process but who are interested in and stand to benefit or lose from a successful/failed program
- Engage interests in an efficient and clear process that supports accomplishing the tasks outlined in this workplan

Deliverables:

a) A project structure fact sheet will be developed that describes the various project committees and teams and how they will interact. This will also explain roles and expectations of those who serve on the various teams and committees and the anticipated level of commitment to the project.
b) A brief description of each project convening will be included in the quarterly and final project reports, which will include number of participants, objectives of the convening, and key outcomes. Specific reporting will cover the following:

a. Working Group webinars, conference calls and meetings (4-6 times per year)
b. Advisory Group webinars, conference calls and meetings (2-4 times per year)
c. Technical Group or other Ad-Hoc webinars, conference calls and meetings

c) Contract with a project Field Coordinator for year 1
d) Contract with a project Field Coordinator for year 2 Contract with a project Field Coordinator for year 3

Timeline: This activity will begin the second quarter of the first project year and will continue throughout the project (Table 1).

4. Assess Feasibility

Assessing feasibility is a critical step in determining if a phosphorus trading program in the LFRW could be successfully implemented. This task looks at the policy and regulatory measures that may impact the proposed phosphorus trading program for the LFRW. Information on existing policies and programs and suggested changes will be compiled to inform the development of a final guidance document (Task 6) and to provide the PMT with information to determine the best approach for establishment of the trading program. Subtasks associated with this task will include conducting a feasibility assessment for credit supply (those who will sell the credits) and feasibility assessment for credit demand (those who will buy the credits).

A. Assess Supply Feasibility

This subtask will involve completing a study to determine whether the whether the LFRW can generate enough phosphorus (P) credits to support a trading program. A first step will be to develop parameters for the supply-side feasibility analysis that can be used to develop an RFP or other directive for obtaining information that can enable the project team to determine supply feasibility. In general, this task will answer the following questions: "*is there enough supply to meet demand in the right place at the right time*?" and "*are P savings from Best Management Practices (BMPs) adequate to offset point source discharges and achieve agreed-upon project goals*?" It will also examine the landowner costs and ability to get P credits to the market.

The GLC, in consultation with NRCS and WDNR, will scope the parameters that this feasibility study should address and will solicit technical assistance through one or more technical contractors and/or by partnering with a federal partner that has unique skills and experience with this type of work. Once the technical contractor/partner is selected to conduct the supply feasibility assessment, the GLC will hold periodic conference calls or meetings (estimated between three and five) with that partner/contractor and will oversee their work to ensure that their final report is of quality and sufficiently answers the primary question(s) associated with this task.

Deliverable: A contractor/partner report on the feasibility of providing adequate supply of P credits to support a trading program in the LFRW.

Timeline: This subtask will be accomplished during the first project year (Table 1).

B. Assess Demand Feasibility

This task will determine whether there is enough market demand for P credits. A demand feasibility analysis will be conducted that will identify and catalogue potential buyers (e.g., WPDES permit-holders and others) and characterize their pollution reduction needs (individual wasteload allocations in terms of pounds of P per year) and the costs to meet those needs through traditional means (e.g., infrastructure upgrades) and the next cheapest compliance option. This task will also endeavor to discern actual demand from potential demand through discussions with potential buyers about the cost, effectiveness, and risk associated with their compliance options (e.g., traditional infrastructure upgrades, adaptive management or trading). This task will provide the PMT with critical information on which entities in the LFRW are willing and interested in trading and the circumstances (e.g., assurances, costs) that they see as critical to effectuate a trade. It is possible that this effort identifies a preferred hybrid approach for some buyers that includes elements of trading and adaptive management *as defined by WDNR*.

The GLC, in consultation with NRCS and WDNR, will scope the parameters that this feasibility study should address and will solicit technical assistance through one or more RFPs and/or by partnering with a federal partner that has unique skills and experience with this type of work. Once the technical contractor/partner is selected to conduct the supply feasibility assessment, the GLC will hold periodic conference calls or meetings (estimated between three and five) with that partner/contractor and will oversee their work to ensure that their final report is of quality and sufficiently answers the primary question(s) associated with this task.

Deliverable: A contractor/partner report on the feasibility of providing adequate demand for P credits to support a trading program in the LFRW.

Timeline: This subtask will be accomplished during the first project year (Table 1).

C. Market Survey (optional)

Depending on the outcomes of Subtasks 4A and 4B above, the GLC may also, with input from project partners, engage in the design and administration of a survey of potential P trading participants to gauge awareness of relevant issues, likely participation levels, and potential market capacity on both the demand and the supply sides. If the results of 3A and 3B above are weak or non-conclusive, a survey will provide additional data to determine feasibility. Survey data will be assessed and compiled to inform supply and demand feasibility and to determine whether the market in the LFRW will support a P trading program. The GLC has survey design and administration capacity and may undertake this activity or may, in consultation with project partners, solicit contractual support for this subtask.

Deliverable: A contractor/partner report on the survey results and recommendations on market feasibility of a trading program in the LFRW.

Timeline: This subtask will be accomplished during the first or second project year (Table 1), depending on the exact timing and outcomes of Subtasks 4A and 4B.

5. Hypothetical Trade Scenario Exercises

GLC staff will identify two to four promising P credit buyers and sellers in the LFRW and set up one to two hypothetical water quality trades. Identification of promising buyers and sellers will be supported by Task 4 above. This task will help validate eligibility and likelihood of participation of specific buyers and sellers. The sellers will be potential credit generators who are located in the LFRW. Real data and information about their farms or other facilities will be used to determine credit generation potential and to help set the value and cost of a credit sale. Likewise, the buyers will be potential credit purchasers who are located in the LFRW. Real data and information about these buyers will be used to determine credit purchase potential and the value and potential cost of a credit purchase. The hypothetical trades will utilize trade ratios and other technical guidelines provided in the WI DNR Water Quality Trading Guidance (Draft, March 2013). Specific BMPs will be selected for one or more specific parcels, trade ratios will be applied, P reductions will be calculated, and credit generation will be determined (lbs/acre/year). A cost per credit generation unit (e.g., lbs/acre/year) will be calculated and a monetary sale value will be explored and determined. All necessary risk and liability assurances shall be prepared to support the trade. As such, this task will also involve testing prototypes of additional forms and processes that will be more fully developed and refined in Task 6 (e.g., eligibility, verification and certification, risk assurance mechanisms, etc.) Importantly, this exercise will expose the greatest areas of risk and uncertainty from both the seller and buyer perspective and will inform which areas to focus on and how they might be addressed in Task 6.

Deliverable: This task will produce drafts of all documentation necessary to demonstrate the actual credit generated by specific activities, the cost of generating that credit for the seller, the agreed upon price of that credit for the seller and the buyer, the amount of money exchanged, and the P reduction implications (e.g. permit modification) that would ensue on the buyer's end.

Timeline: This task will begin and be completed during the third project year (Table 1).

6. Design Program and Develop Phosphorus Trading Guidance Document for LFRW

Once it has been determined that a P trading program for the LFRW is feasible from both supply and demand standpoints, then the Fox P Trade will begin to design the actual program. This task involves preparing a guidance document that achieves the ultimate goal of Fox P Trade by describing precisely how a P trading program will work in the LFRW and the requirements and processes for buyers and sellers to participate in the trading program. Much work has already been done by the WDNR to support this task. Most notably, methods to quantify the water quality improvements are identified and trade ratios are established in the WDNR Water Quality Trading Guidance (Draft, March 2013). Additionally, the TMDL for the LFRW identifies specific wasteload allocations and load allocations for P

that provide a baseline from which to measure specific improvements for each of the 14 sub-watersheds (plus Green Bay) and credit generation thresholds, which includes 45 individual TMDLS for excess phosphorus and/or sediment loading in waterways within the LFRW. The P Trading Guidance Document for the LFRW to be developed under this task will build on these efforts and undertake complementary subtasks to address additional legal (i.e., risk management) and administrative process (i.e., initiating and effectuating a trade) aspects of trading that are not addressed in the state guidance and that are tailored to meet the specific needs of buyers and sellers in the LFRW. The following subtasks are steps that will guide the GLC and project partners in designing the program.

A. Validate project goal

The outcome of Task 2 above will be used to state the goal of the P trading program in the guidance document. The process for reaching consensus on and rationale for that goal (Task 2) will be summarized.

Deliverable: The deliverable for this subtask is a validated goal for the project (as articulated in Task 2) that has been reviewed and is supported by the PMT and the working group. This will be provided in a quarterly report with documentation describing the review and vetting of the project goal. Any changes from the working goal will be reflected in project documents that are public (e.g., fact sheets).

Timeline: The working project goal contained in this workplan will be vetted by the PMT and working group in the first project year (Table 1).

B. Verify quantification methods (to show water quality improvement) and establish unit of P to be traded

The quantification methods for showing water quality improvement are identified in the WDNR Water Quality Trading Guidance (Draft, 2013) and the ability to measure credit generation is established in the TMDL through measuring the difference between baseline and wasteload/load allocations expressed as ***pounds of phosphorus per acre per year***. The use of *lbs/acre/year* of P as a unit of trade will be vetted and validated, or modified if necessary. A variety of models and tools to calculate P reductions are recommended by the DNR. Fox P Trade will try to simplify or aggregate them into a tool or tools that can be readily used by buyers/sellers to calculate potential P reductions based on specific management practices.

Deliverable: A credit calculator that quantifies P reductions (and possibly other environmental improvements) associated with various management practices and converts them into credits that can be traded. This might be a model or formula for calculating P reductions that is easy to use by prospective sellers (credit generators) and buyers (credit users).

Timeline: This subtask will begin at the end of year 1 and is expected to be completed by the end of project year 2 (Table 1).

C. Design elements to address risk and uncertainty

This step will address risk and uncertainty at multiple levels. Through the convening process (Task 3), the key areas of risk and uncertainty in the LFRW will be identified. The following steps will be considered and vetted with stakeholders; those that are relevant to the project will be described in detail in the guidance document.

- Establish eligibility criteria to determine who can buy and who can sell credits, and when and where they can be bought and sold, including:
    - Identification and validation of BMP performance standards
    - Timing of credits, and credit duration, including interim credit potential and long term credits: (e.g., reconciling BMP performance periods with permit cycles)
    - Locations of promising trade areas
- Determine whether, which and how cost share funds can be used to support trading
- Specify the verification process to determine whether sellers are complying with rules and procedures and whether BMPs are performing as expected (i.e., achieving performance standards).
- Describe the process of certification whereby a third party determines and certifies all necessary documentation is in place (including any model forms or documents) and suggest necessary qualifications for third-party entities who would perform this function.
- Recommend an approach for reporting and tracking LFRW P trades, such as a registry and list the information that must be reported. This will include WDNR requirements and any supplemental or alternative requirements that might be part of a LFRW P trading program. It might also suggest qualifications for entities that would set up and manage such a registry.
- Use the trade ratios established in the WDNR 2013 Draft WQT Guidance in this LFRW trading guidance document to help buyers and sellers determine whether program participation is feasible and at what level.
- Develop risk assurance mechanisms to address liability, enforcement, and other risks. This will likely be in the form of a "crediting protocol" and/or contract templates that address commonly anticipated risks which will be identified through consultations with stakeholders, and might include things such as:
    - Roles, responsibilities regarding BMP implementation and remedies for cases where BMPs are not maintained as promised
    - Possible enforcement actions if a point source buyer fails to acquire adequate credits or remedies if the purchased credits fail

Deliverable: The deliverable shall be a narrative section of the final guidance document (subtask 6.E) that addresses each of the bulleted items above. Specifically, there will be

narrative sections and supporting templates and model forms/contracts for each of the items underlined in the bulleted list above.

Timeline: This subtask will begin during the fourth quarter project year 1 and be completed by the first quarter of project year 4 (Table 1).

D. Program Administration

This step will determine whether a third party would be desirable for effective program implementation, and if so, identify the qualifications of a program administrator. This will be done through iterative interactions and discussions with key stakeholders throughout the project. A specific stakeholder engagement will be undertaken in the fourth project period when the guidance document is final or nearly final. Once it is known what the program will require, this will inform a discussion as to whether a third party would be appropriate and desirable to implement the program and the type of entity that should be.

Deliverable: A narrative section of the final guidance document (subtask 6.E) shall be provided that briefly describes roles of various program administrators that were assessed under this subtask. If it is determined that a program administrator is appropriate, a list of desired program administration services will be provided as an additional deliverable.

Timeline: This subtask will begin during the second quarter of project year two and be completed by the first quarter of project year 4 (Table 1).

E. Draft and Publish Guidance Document

The document will be drafted throughout this entire task. Iterative drafts will be developed with input from key project partners and initial and final drafts will be shared with a broader stakeholder group for general feedback.

Deliverables: This subtask will produce a P trading guidance document for the LFRW. This document will describe precisely how a P trading program will work in the LFRW and the requirements and processes for buyers and sellers to participate in the trading program. Deliverables from subtasks 6.A-6.D will support and be included as part of this overall this guidance document. An additional deliverable will include an Executive Summary or stand alone fact sheet summarizing the program.

Timeline: This subtask will begin during the first quarter of project year 2. An interim deliverable—a draft of the guidance document—will be completed by the second quarter of project year three. The draft will undergo review and be complete by the end of the second quarter of project year 4 (Table 1).

7. Pilot Design (*Optional, As Resources Allow*)

GLC will seek to design a pilot P trading project in a sub-area of the LFRW. The pilot will use the guidance document and supporting information to identify one or more prospective buyers and one or more prospective sellers and to facilitate a trading agreement (possibly those buyers and sellers selected for Task 5). This will test the utility of the guidance document. The processes and mechanisms established under subtask 6.C will be applied to craft a trading agreement and all supporting documentation.

Deliverable: This task, if completed, will produce all documentation necessary to effectuate a trade and commitments from at least two parties to commence activities and engage in that trade. Funding is allocated to this task, but it is not known whether this funding will be sufficient to complete this task. If incomplete, the deliverable for this task will be a detailed accounting of efforts to effectuate a trade and commitments from at least two parties. Although the trading process will commence under this task, this task will not oversee the complete implementation of the trade.

Timeline: This task, if undertaken, will begin during the fourth quarter of project year 3 and be completed during the final project year (Table 1).

8. Lessons Learned

From the Pilot Design exercise, parts of the guidance that are in need of further refinement or improvement will be identified and documented.

Deliverables: A report on lessons learned from Fox P Trade will be prepared for the intent of replicating water quality trading programs elsewhere in the Great Lakes Basin. Also, recommendations for modifications to the guidance document will be prepared and incorporated into the final project report and as a supplement to the guidance document.

Timeline: This task will be undertaken and completed during the final project year (Table 1).

Table 1: Project Timeline

Fox P Trade -- Total Project: 42 months -- 3/1/13 - 9/30/16					
Task	*Title*	*Year 1 (2013)*	*Year 2 (2014)*	*Year 3 (2015)*	*Year 4 (2016)*
1	Develop Workplan and Project WQ Goal				
2	Convene Stakeholders				
3	Feasibility: Supply				
	Feasibility:Demand				
	Feasibility: Market Survey				
4	Hypothetical Trade Scenarios				
5	Design: Articulate Goal				
	Design: Quantification Methods				
	Design: Manage Risk				
	Design: Program Administration				
	Design: Guidance Document				
6	*Pilot Design (as resources allow)*				
7	Lessons Learned				