

Chartering Session: Jordan Lake Water Quality Trading Study
April 12, 2006
Mebane Arts and Community Center
Meeting Summary

Meeting Introduction

The meeting was opened by Don Freeman with the Cape Fear River Assembly (CFRA), who gave opening remarks and a historical perspective of the Cape Fear River Basin project. Inga Kennedy, meeting facilitator, provided an overview of the agenda, discussed meeting objectives and ground rules, and facilitated the introduction of attendees. Each person received a set of handouts that included the meeting agenda, power point presentations, draft vision and goals, and written examples of water quality trading programs in Oregon and Texas.

Introduction to Trading

Cy Jones, with CH2M Hill, presented an overview of water quality trading. He discussed the overall concept of water quality trading and the purpose of its use. He described the benefits of trading and EPA's voluntary policy guidance. Mr. Jones gave a detailed description of how and where trading may occur and discussed how trading might work in the state of North Carolina. He also provided examples from around the country where trading programs are currently being implemented. The following question was asked after his presentation:

Question: Does EPA have to approve local trading programs?

Response: No. The EPA approval that does occur is generally indirect. The Trading Policy says that states can authorize trading by including trading provisions in such things as the state's continuing planning process, water-quality management plans, TMDLs, or water-quality standards. EPA reviews and approves some of these programs.

Introduction of the Project

Ruth Swanek, with CH2M Hill, presented the elements of the proposed water quality trading study in the Cape Fear River Basin that focuses on Jordan Lake. She identified possible stakeholders and the benefits to them from participation in a trading program. Ms. Swanek discussed the project's objectives and a possible six step process conducted by CFRA that would include (1) visioning and chartering, (2) designing the trading program (3) developing an implementation framework, (4) evaluating and enhancing existing monitoring programs, (5) a pilot demonstration, and (6) expanding programs to other watersheds in the region. She presented a proposed schedule to achieve the project's six steps, which is a 17-month process. The CFRA's grant with EPA expires in September 2007. The following comments were made after Ms. Swanek's presentation:

Comment: Discussions with the North Carolina Division of Water Quality (NCDWQ) need to occur early in the process to evaluate their support for a trading program in the Jordan Lake watershed. DWQ should be at the table.

Response: Two representatives from DWQ were in attendance. One representative indicated that they are helping to write the TMDL rules; DWQ is supportive of the trading project.

Comment: Funding trading programs will become an issue with stakeholders. Specific funds need to be identified for the program. One stakeholder asked if it appropriate to use Ecosystem Enhancement Program funds to help pay for projects that will be used to obtain trading credits.

Response: Funding availability will be explored.

Break-out Session 1: Group Results and Discussion

Attendees were divided into five groups for a breakout session to discuss and provide feedback on the presentations. Specifically, the groups were asked to discuss their *interests and concerns*, and to provide *feedback on the project approach*. A summary of each group's discussions is provided below.

Group 1

Interests

- Achieving the WWTP allocation is important
- Improving Jordan Lake water quality
- Developing a program that could be applied to MCFRB and to the rest of North Carolina
- Achieving reduction in existing storm water load
- Close examination of point source to point source trading opportunities

Concerns

- Avoid creating localized water quality hot spots
- There may not be realistic trading opportunities in the UNHA watershed
- Consider multiple detriments of water quality trading in addition to the multiple benefits
- Proposed NPS load reduction may not be achievable
- There must be accountability in achieving load reductions
- Accountability, credibility and bookkeeping are essential to the success of a trading program

Project Approach

- Need close coordination with DWQ
- Need a transparent process with stakeholder interaction
- The project and outcome are more important than the timeline

Group 2

Interests

- Openness and accountability need to be built into the trading program in order to maintain stakeholder support and confidence in the program.

- Identify how rules will be established
- Quantify BMP's impact
- All stakeholder groups need to be adequately represented
- Identify how trading between point sources and NPS will work particularly when multiple pollutants are involved
- We all want to do what is right to protect water quality in the most cost effective way
- Lots of interest in the economics of possible programs

Concerns

- What if we go through this and still have problems?
- How is the economic value of a credit to be determined?
- Identify how regulatory issues, which vary widely among various jurisdictions, watershed areas and municipalities, will influence the trading program
- If one member is out of compliance how will this impact the group?
- It is important that the trading program provide members multiple trading options

Project Approach

- Concerned about the large stakeholder group, but also about stakeholders not represented at the meeting
- Designate a specific person to take notes at all meetings
- Increase interaction with DWQ

Group 3

Interests

- Trading is useful if it allows stakeholders to achieve reductions cost-effectively
- The trading rules should be written to allow the private sector to trade
- Sustainable and high quality water supply
- Establish a means to work cooperatively with other entities in the watersheds
- Want to be able to use trading to utilize high density development in areas where local water supply protection rules impose restrictions on the level of imperviousness
- Want to be able to allow higher density development by trading for lower density or conservation in other areas
- Want to improve water quality in Jordan Lake and local streams

Concerns

- Extreme difficulty of achieving reduction goals (feasibility issue)
- Send some storm water to sewage treatment plant
- Will draft regulations assign target loads for non-point sources instead of just a reduction amount?
- Identify what can be done with passive BMP's (can these be used?)
- Getting credit for projects and practices implemented before rules
- Support projects and practices to address aerial nutrient sources
- Want DWQ/DENR to consider air pollution issues (cross media trading)
- Concerned about how credits will be generated/quantified and credited

- Concerned that trading will sacrifice water quality in one area for improvement in another. Prevent degradation of any water body for the benefit of another
- Want trades to address both local and Jordan Lake water quality issues.
- Who would be monitoring the effectiveness and maintenance of BMPs utilized for trades?

Project Approach

- Municipalities are willing to consider alternative development practices
- Want assistance with identifying and designing BMPs
- Want to have options for creatively addressing nutrient sources (nitrogen species/nitrogen cycle)

Group 4

Interests

- Biggest bang for the buck
- The project will clearly identify whether trading is valuable for point sources in the Jordan Lake watershed
- Will the TMDL allow/recognize NPS reduction credits associated with retrofits?
- Put in place a framework that stakeholders can use to determine whether trading is economically beneficial

Concerns

- All stakeholder interests are not represented (agriculture, home builders)
- Frequency of meetings
- Aging sewer lines are a source of pollutants
- Other regulations/objectives are in place for NPS pollutant reduction. How do you evaluate the cost of this to determine if a trade is economically beneficial?
- NPS is a large percent (greater than 70% for TP in Haw)
- There is a large uncertainty associated with quantifying NPS loadings.
- How will NPS loads be quantified and monitored?
- Want to ensure that the nutrient reductions from trading are effective and economically beneficial
- Storm water – how will credits be determined? Will a baseline nutrient load from stormwater be estimated?
- Putting the cart before the horse – TMDL rules not completed yet; costs will be dependent on the type of upgrade and plant size
- Need to know the final target to estimate costs
- Ensure regulatory authority is in place

Project Approach

- More details are needed on the approach
- Trading framework should be flexible so that it can be easily modified if TMDL changes
- Make very clear whether the project is valuable or not

Group 5

Interests

- Flexibility in ways to achieve nutrient reductions
- Cost reductions

Concerns

- Jurisdictions and assignment of load
- Accounting (pollutant loads and reductions, particularly for stormwater)
- Trading with storm water hasn't been done so there is no model to follow (pros and cons)
- Schedule of trading program relative to schedule of rule making
- TMDL still draft – changes may occur
- Will the area loading targets change between now and the final TMDL? Get a status update from DWQ.
- Schedule of pilot program; is there enough time to actually implement BMPs?
- Approval process – who will have to approve the trading program? (DWQ?, EPA, Legislature?)
- Definition of point and non-point sources (EPA vs North Carolina)
- Atmospheric deposition; how deal with this source of nitrogen?
- Have the agriculture industry represented in stakeholder group
- How does the Jordan watershed model affect our trading programs? (will the trading program use the model's loading rates and boundaries?)
- Spatial relationship between sources must be addressed (Fate and transport of pollutants to the lake)
- How will the uncertainty ratios be developed?
- Is there enough existing data to support cross pollutant trading?

Project Approach

- Overall good team
- Need good distribution of stakeholders; need agricultural representatives

Develop Project Charter Components

The charter process requires the development of a vision and goals as well as critical success factors that guide the achievements of the project. Attendees were asked to review the draft vision, goals and success factors contained on the handout and participate in a discussion. The following feedback was provided.

Draft Vision Statement

To develop, demonstrate, and evaluate an innovative water quality trading program for the Jordan Lake watershed that will enable more cost-effective implementation of the TMDL. This program will provide a model that can be evaluated for application in other watersheds within the Cape Fear Basin, in North Carolina, and other areas of the Country.

Comments on Draft Vision

- The word “Implement” is missing.
- Who champions if there is value in adding “implement” to vision?
- Be careful about assuming that there is a large pool of NPS credits that can be traded
- Need incentives to generate NPS credit
- Could result in product that may not be viable in Jordan Lake but is applicable elsewhere
- Add “maintain and enhance water quality” to the draft vision (general agreement)
- Add language like: WQ protection & implementation of TMDL
- Is it feasible to implement in the given timeframe?
- Process needs an administrative framework

Draft Goals

- Develop a trading and watershed permitting framework for the Jordan Lake Watershed.
- Protect water quality.
- Provide dischargers with options for implementing the TMDL in a more cost effective manner.
- Include urban stormwater in the program.
- Demonstrate the utility of the trading and watershed permitting framework in selected watersheds.
- Evaluate the trading program and document lessons learned for application in other areas of the Cape Fear Basin and other watersheds around the Country.

Comments on Draft Goals

- Include other NPS in addition to urban stormwater
- 3rd bullet – revise to “dischargers & NPS”
- Sources will evaluate whether cost-effective. Need options
- If this project is going to be valuable to DOT, then roadway runoff should not be considered urban stormwater 2nd bullet – Revise to “Improve & protect”
- Identify the parameters that will be used to evaluate pilot projects
- Implement pilot projects in the UNHA and in the Haw River Arm and implement many different types of trades (address multiple issues not just repeats of point to stormwater trades)
- 5th bullet- Revise to “Evaluate this project”
- Learn from the Tar-Pam trading example: review carefully NPS problems with accountability and tracking agricultural interest in buying credits
- Clarify the intent of pilot project - is it a paper exercise or actual demonstration?
- Identify potential pilot project options for stakeholders within a specific watershed
- Provide tools that stakeholders can use to determine whether specific trades might be beneficial for them

Draft Successful Program Outcomes

- Provide more cost saving options for the regulated community than conventional frameworks
- Acceptance by NCDWQ and USEPA
- Protection of water quality

- Stakeholder participation in pilot watershed trades
- Completion within budget and schedule established by the USEPA

Comments on Successful Program Outcomes

- 2nd bullet- revise to include the public
- Define regulated community – is this limited to anyone in the watersheds subject to the TMDL?
- Acceptance vs. Approval
- Market-based vs. Set credit price
- Who will do the credit accounting? An existing organization or a new organization?
- How will accountability be monitored and progress reported?
- Trading program will be established that will specify how trades will occur, how credits will be tracked and reported, and what trading options are available
- 4th bullet- the stakeholders must understand the pilot project and how it will work
- Provide flexibility in complying w/Jordan Lake rules
- Protection of Water quality in the entire watershed not just in Jordan lake
- Make the trading program simple and easy to understand
- Advertise the program and educate the public about trading

Meeting Conclusion

The meeting was concluded with a general discussion about the meeting and the process. Many of the attendees have participated in other processes and expressed some concern about participating in another stakeholder process. The attendees agreed that the day of the week and location were acceptable (Wednesday afternoon is good time for meetings). Significant emphasis was placed on the need to insure that the agricultural and development community be involved. The original list of invitees will be sent to the attendees to review for stakeholder participation along with the meeting summary. The next meeting will be scheduled for late May.