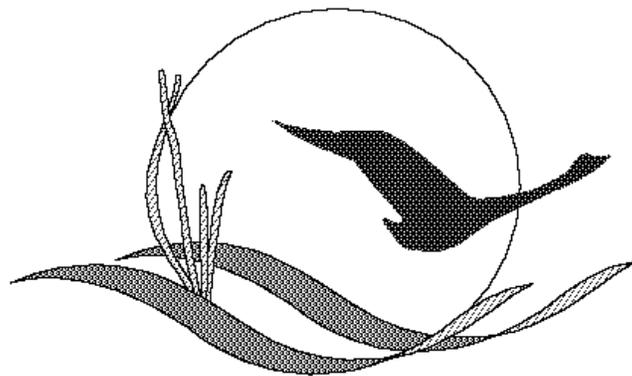


***NUTRIENT TRADING***  
*In the*  
*Chesapeake Bay Watershed*  
***Public Workshop Proceedings***

**January, 2001**  
**Maryland, Virginia, Pennsylvania &**  
**Washington D.C.**



**Organized by:**  
Katrin O'Connell, Chesapeake Workshops Unlimited

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## INTRODUCTION

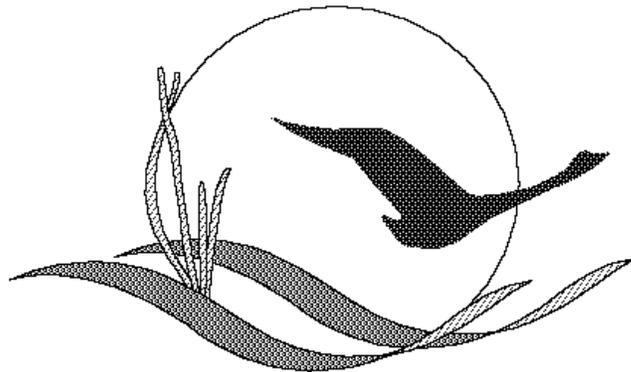
The Chesapeake Bay Program completed a document delineating nutrient trading guidelines entitled “Nutrient Trading Fundamental Principles and Guidelines – Draft” and made this document available to the public for review on September 8, 2000. A series of public meetings were held during the months of September and October in a variety of locations around the Chesapeake Bay watershed for the purpose of providing the public with an explanation of the meaning and purpose of these trading guidelines and to give the public a chance to comment on them. This document herein is a compilation of the public meeting proceedings prepared for each of the 16 public meetings. The format for each proceedings is similar in that it includes a title page, an introduction, a summary of the discussions and comments arranged according to subject matter closely reflecting the table of contents of the guidelines document itself, and a list of meeting participants. Below is a table summarizing the state, date, and location of each of the public meetings.

### NUTRIENT TRADING PUBLIC WORKSHOP DETAILS

STATE	MEETING LOCATION	MEETING BUILDING	MEETING DATES/TIMES
PA	Wilkes-Barre	DEP NE Office	9/26 2-4pm,7-9pm
	Williamsport	DEP North Central Office	9/28 2-4pm,7-9pm
	Harrisburg	DEP Rachel Carson Bldg	10/5 2-4pm,7-9pm
MD	Laurel	WSSC Headquarters	9/26 2-4pm,7-9pm
	Hagerstown	Hagerstown Community College	9/27 7-9pm
	Eastern Shore	Salisbury State	9/29 7-9pm
DC	DC	Martin Luther King Library	10/10 6:30 - 8:30pm
VA	Bridgewater	Bridgewater Retirement Center	Sept. 26 10 - 12pm
	Manassas	Manassas Battlefield Holiday Inn	Sept. 28 2-4pm, 7-9pm
	Richmond	VA Power Office in Innsbrook, VA	October 3 2-4pm,7-9pm

***NUTRIENT TRADING***  
*In the*  
*Chesapeake Bay Watershed*

***Public Meeting Proceedings***  
**Wilkes Barre, PA**  
**September 26, 2000**  
**2-4pm & 7-9pm**



**Prepared by:**  
Stuart Gansell

## INTRODUCTION

The public meetings provided an opportunity for public review and comment on the Draft Nutrient Trading Guidance Document. The document was written by the Nutrient Trading Negotiation Team, a group composed of a wide array of interested stakeholders from across the Chesapeake Bay watershed. The guidance document presents fundamental principles and guidelines for nutrient trading developed by the Negotiation Team after detailed deliberations and a consensus-based process that extended over the course of a year. This public workshop was held in Wilkes-Barre, PA at the Pennsylvania at the Department of Environmental Protection Regional Office on September 26, 2000. Sessions were held from 2-4 p.m. and from 7-9 p.m. Combined, there were 14 participants. Their major questions and comments are presented in detail below (*categories follow the guidance document table of contents*):

## DISCUSSION

Stuart Gansell (NT representative from PADEP) presented a summary of major outcomes of the negotiation team's deliberations and conclusions of the guidance document. Mr. Gansell and Robert Koroncai (NT representative from EPA Region III) answered questions and concerns that were raised.

### I. Definitions

None

### II. Fundamental Principles (summarize according to #'s 1 – 8)

#### Fundamental Principle #7:

**Question:** What does substantial compliance mean? You need to put more specific criteria to this term.

**Answer:** Substantial compliance was not defined in the guidance, but the intent is to allow only good environmental stewards and good corporate citizens to participate in the trading program. The term will be more specifically defined as the states develop their own individual programs.

### III. Guidelines for Identifying Nutrient Reduction Goals

**Question:** Why limit trading to “like” sources in trading to achieve the cap? This seems to substantially limit trading opportunities until the goals are achieved.

**Question (comment):** Trading should not be limited to “like” sources to achieve the goal. Trading should be open to the broadest application possible.

**Answer:** This approach will allow the program to be implemented and enable experience to be gained while minimizing risk. This issue will be re-evaluated by states after experience with the program has been gained to determine if cross-source trading to achieve the cap is appropriate.

**IV. Guidelines for Determining Eligibility**

**Question (comment):** Trading should not be limited to nutrients in the Bay. It should apply to all pollutants.

**Answer:** This program is focused on nitrogen and phosphorus because the most pressing need is to develop additional tools to accelerate nutrient loading reductions to the bay. Individual states may expand the scope of their trading programs based on statewide needs.

**Question (comment):** The terms “baseline” and “allowance” need to be better defined. This could be defined as a reduction from a certain point in time or a reduction from a certain treatment technology or as a cost/pound of making nutrient reductions.

**Answer:** Baseline loads are generally defined for nonpoint sources based on implementation of expected nutrient and sediment reduction plans, and BMP installation. Point source baselines are determined after installation of appropriate technology. Allowances are generally defined through the individual states’ Nutrient Reduction Strategies that were developed to achieve the 40% nutrient reduction goal for the bay. Pennsylvania is in the process of updating its strategy. Allowances will also be more clearly defined after development of water quality criteria for the bay waters.

**Question:** How do we calculate NPS credits?

**Answer:** The details have not been settled but NPS credits will likely be established through modeling techniques based on expected efficiencies of BMPs.

**V. Guidelines for Performing Trade Administration**

None

**VI Guidelines for Ensuring Accountability**

**Question (comment):** In developing this trading program, consideration should be given to how air source trading is conducted. It is a more regulatory based approach and makes the seller of the credits directly accountable. Joe Goffman of EDF was a big player in developing the air-trading program in Pennsylvania and should be contacted.

**Answer:** Mr. Goffman will be asked to participate in the state work group that will be formed to develop Pennsylvania’s specific trading program.

**VII Guidelines for Assessing Progress**

None

**VIII Guidelines for Stakeholder Involvement**

None

**IX General Comments**

**Question (comment):** The point that trading will save money for ordinary citizens, either through lower cost of manufactured products or through lower user fees for municipal sewage treatment customers, should be better emphasized.

**Answer:** Consideration will be given to adding more specific language in the “Background” portion of the document to address this suggestion.

**Question:** How does this relate to toxic problems in our area?

**Answer:** The document doesn’t address toxics. It is specific to nutrient trading, although Pennsylvania may choose to expand this trading concept to other pollutants.

**Question:** Are there dams on the Susquehanna River filling up with sediment and what will that do to the trading program?

**Answer:** Yes, for example, indications are that Conowingo Dam may be filled within the next 10 years. Changes to water quality trading ratios or reductions in allowable loads could result. Discussions have begun to find ways to retain the sediment trapping capacity of the dams.

**Question:** Doesn’t trading provide a disincentive for nutrient control?

**Answer:** Incentives far outweigh any disincentives. A trading program will push facilities to do more than the minimum so they can earn and sell credits. Nonpoint source owners will also install controls that would not otherwise be installed to create credits for sale. The combined impact will be an overall improvement in water quality.

**X. Grammatical and Editorial Comments**

None

**MAJOR CONCLUSIONS**

The audience asked pertinent questions and was interested in the details of program implementation. Many of the details will not be available until the states implement their individual trading programs. Generally, the audience seemed to favor allowing cross trading to achieve the nutrient cap. Better defining “substantial compliance” was also important to the attendees. There was no opposition to the proposed program.



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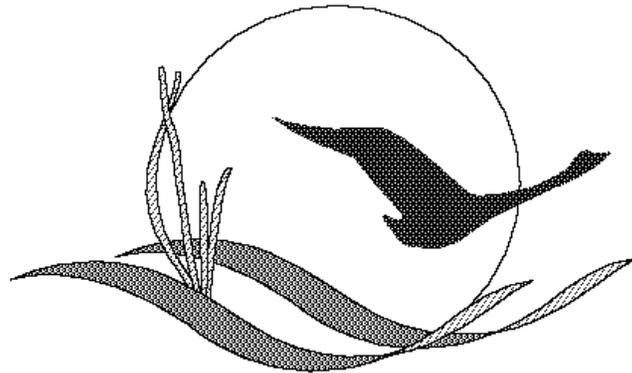
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***NUTRIENT TRADING***  
*In the*  
*Chesapeake Bay Watershed*

***Public Meeting Proceedings***  
**Williamsport, PA**  
**September 28, 2000**  
**2-4pm**



**Prepared by:**  
Bob Yowell

## INTRODUCTION

The public meetings provided an opportunity for public review and comment on the Draft Nutrient Trading Guidance Document. The document was written by the Nutrient Trading Negotiation Team, a group composed of a wide array of interested stakeholders from across the Chesapeake Bay watershed. The guidance document presents fundamental principles and guidelines for nutrient trading developed by the Negotiation Team after detailed deliberations and a consensus-based process that extended over the course of a year. This public workshop was held in Williamsport, PA at the Pennsylvania at the Department of Environmental Protection Regional Office on September 26, 2000 from 2-4 p.m. Participant's major questions and comments are presented in detail below (*categories follow the guidance document table of contents*):

## DISCUSSION

Bob Yowell, of the Pennsylvania Department of Environmental Protection, presented a 45 minute summary of major outcomes of the negotiation team's deliberations and conclusions of the guidance document.

### I. Definitions

None

### II. Fundamental Principles

**Question:** Who will want to buy credits, offsets?

**Answer:** Someone wanting to expand, such as a treatment plant. They could buy credits to reach and maintain their goal. Then they could expand the plant, meeting the reduction goal.

### III. Guidelines for Identifying Nutrient Reduction Goals

**Question:** Will the conservation district be inspecting?

**Answer:** Possibly, there could be an inspection fee to cover this activity. The state is responsible but doesn't have to physically do it.

**Question:** The Nutrient trade program Chesapeake Bay 2000 will cause a reduction in the bay, but will it benefit tributary areas?

**Answer:** Yes, the farmer that owns land up stream pays for lower farmer to set up buffer. This helps control runoff of nitrogen phosphorus, and sediment.

### IV. Guidelines for Determining Eligibility

**Question:** Can trade be initiated before meeting the 40% reduction?

**Answer:** Trading may be used to achieve the 40% reduction goal between like dischargers, point sources to point sources or non-point sources to non-point sources, but not between point sources and non-point sources to achieve the 40% reduction.

**Question:** How is the community dealing with non-signatory states?

**Answer:** Trading will only be allowed among sources from signatory states. Non-signatory states may participate as long as they adopt an appropriate allowance set by the program.

**Question:** What is the reason credits will only cover reductions paid by the source?

**Answer:** If state or federal funds used for any part to achieve nutrient reductions, that share is not available for trading.

## V. Guidelines for Performing Trade Administration

**Question:** Is trade permitted between areas inside the basin?

**Answer:** Trade is unrestricted in Pennsylvania as long as there is no water impairment between areas.

**Question:** Will trade between point sources and non-point sources be permitted?

**Answer:** After the 40% reduction goal is achieved, trading between point sources and non-point sources will be permitted.

**Question:** Will farmers bring on trade themselves?

**Answer:** Yes

**Question:** Will there be public participation for each trade?

**Answer:** This will have to be worked out in the future, but we see it as a critical component of trading.

**Question:** How will the credit pricing be set?

**Answer:** The market will typically establish this.

## VI. Guidelines for Ensuring Accountability

**Question:** If New York doesn't join, will they be held accountable?

**Answer:** They could accept the new CBP allocation for NY and agree to achieve that cap. If they did, and we hope they will, they could trade in NY and with Pennsylvania.

## VII. Guidelines for Assessing Progress

**Question:** Will the proposed nutrient trade produce results sooner than without trade?

**Answer:** If everyone meets the allocation, results will be seen sooner than without. If someone is over-achieving they should sell. Over-achievement of reductions happens when credits are sold.

## VIII. Guidelines for Stakeholder Involvement

None

## IX. General Comments

**Question:** Pertaining to the pie chart, what is the relationship between agriculture and air?

**Answer:** Farmers look just at agricultural runoff, but they are responsible for air pollution too from the ammonia given off from manure. They tie in together.

**Question:** Ratio – is it a portion of credit?

**Answer:** It is a percent reduction in the reduced load. It may be to account for risk and uncertainty (like a BMP) or for distance (like a delivery ratio).

**Question:** Will the questions and the answers, from all the meetings, be distributed to everyone who attended a meeting?

**Answer:** No, but all questions and answers will be on the Internet.

**Question:** Is Nutrient Trading tied into Carbon Trading?

**Answer:** Any trading system is similar. Most trading systems so far in existence would be small in comparison to the Chesapeake Bay Program NT system as we envision it.

## X. Grammatical/Editorial Comments

None



## **NUTRIENT TRADING PUBLIC WORKSHOP PARTICIPANTS**

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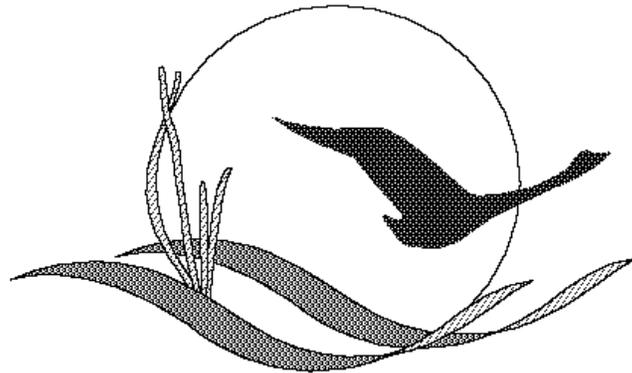
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***NUTRIENT TRADING***  
*In the*  
*Chesapeake Bay Watershed*

***Public Meeting Proceedings***  
**Williamsport, PA**  
**September 28, 2000**  
**7-9pm**



**Prepared by:**  
Bob Yowell

## INTRODUCTION

The public meetings provided an opportunity for public review and comment on the Draft Nutrient Trading Guidance Document. The document was written by the Nutrient Trading Negotiation Team, a group composed of a wide array of interested stakeholders from across the Chesapeake Bay watershed. The guidance document presents fundamental principles and guidelines for nutrient trading developed by the Negotiation Team after detailed deliberations and a consensus-based process that extended over the course of a year. This public workshop was held in Wilkes-Barre, PA at the Pennsylvania at the Department of Environmental Protection Regional Office on September 26, 2000. Sessions were held from 7-9 p.m. Their major questions and comments are presented in detail below (*categories follow the guidance document table of contents*):

## DISCUSSION

Bob Yowell, of the Pennsylvania Department of Environmental Protection, presented a 45 minute summary of major outcomes of the negotiation team's deliberations and conclusions of the guidance document.

### I. Definitions

None

### II. Fundamental Principles

None

### III. Guidelines for Identifying Nutrient Reduction Goals

1. TMDLs are created when the permit is created. All waters are to be assessed by 2005. Equation for TMDLs is waste load + load margin of safety = total nutrient a stream can absorb and remain unimpaired.
2. We can't meet deadline for TMDLs.
3. Pennsylvania has only done (17) approved TMDLs. The model to do a whole watershed worth of TMDL segments was just approved by EPA last year.

### IV. Guidelines for Determining Eligibility

None

**V. Guidelines for Performing Trade Administration**

- 4. What is the cost of a credit?  
The market should set the costs.

**VI. Guidelines for Ensuring Accountability**

None

**VII. Guidelines for Assessing Progress**

None

**VIII. Guidelines for Stakeholder Involvement**

- 5. The stakeholder group in Pennsylvania will be a large group with representatives from many points of view:
  - Industry
  - Environmental groups
  - Watershed groups
  - Agriculture
  - Local government, etc.

**IX. General Comments**

- 6. There was not enough detail about the report and the subject of Nutrient Trading in the announcement of the meeting.
- 7. There is a big discrepancy between states; such as, terminology. Where we have NPS as our major issue, other states have PS and large population growth.

**X Grammatical/Editorial Comments**

None



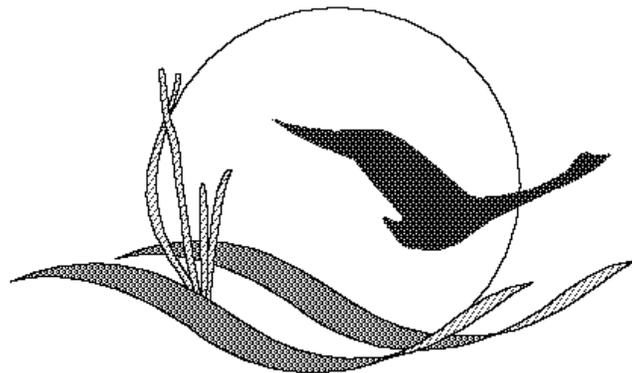
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***NUTRIENT TRADING***  
*In the*  
*Chesapeake Bay Watershed*

***Public Meeting Proceedings***  
**Harrisburg, PA**  
**October 5**  
**2-4pm & 7-9pm**



**Prepared by:**  
Julie Trask

## INTRODUCTION

The public workshops provided an opportunity for public review and comment on the Draft Nutrient Trading Guidance Document which was written by the Nutrient Trading Negotiation Team, a group composed of a wide array of interested stakeholders from across the Chesapeake Bay watershed. The guidance document presents fundamental principles and guidelines for nutrient trading derived by the Negotiation Team after detailed deliberation and a consensus based process over the course of a year. This public workshop was held in Harrisburg, Pennsylvania at the Department of Environmental Protection on October 5. A 2-4 p.m. and 7-9 p.m. session was held. Combined, there were 20 participants. Their major questions and concerns are presented in detail below (*categories follow the guidance document table of contents*):

## DISCUSSION

Allison Wiedeman presented a 45 minute summary of major outcomes of the negotiation team's deliberations and conclusions of the guidance document. Questions and concerns were answered by Allison Wiedeman, Stu Gansell (NT rep. from the PA DEP), David Bingaman (an NT rep. from the PA. Dept. of Agriculture), and from Larry Tropea (PA DEP).

### I. Definitions

None

### II. Fundamental Principles (summarize according to #'s 1 – 8)

#### Fundamental Principle #1:

**Question:** What about degradation? How can you not call it that when someone is not meeting their load allocations. And what if I live in that place where they can't get their loadings down?

**Answer:** FP#1 states that water quality cannot be compromised. There can be no net increase in loadings.

**Concern:** If I am living downstream from the facility that can't meet it's standards, and upstream from the one that is, am I happy?

#### Fundamental Principle #4:

**Question:** If one party has credits and sells to another party that isn't reaching their standard, isn't this reducing water quality? And why wouldn't that second party be forced to reach their standards?

**Answer:** The trading program has to ensure a net gain of reductions. There are some facilities that can't meet their levels. For instance, there is an industrial plant in Maryland that can't do BNR because of a toxicity problem. Another option with trading is to permanently retire a percentage of credits with every trade. This incrementally improves water quality with every trade.

#### Fundamental Principle #6:

**Question:** FP#6 states that trading can only take place within each major tributary. How does this work with FP#1? The Susquehanna is so large, do you use water quality ratios?

**Answer:** All Fundamental Principles need to be collectively looked at. You can't do #6 if you're violating #1. Some members on the team felt that trades should not be restricted to watersheds to increase the market, and others wanted to use sub-basins instead of the large watersheds. There is a caveat that a reevaluation will be done after two years of a trade.

## Fundamental Principle #6:

**Question:** How are you going to do cross-states, but not cross watersheds?

**Answer:** As long as their programs are consistent with each other, they should be able to trade, for example Maryland and Virginia with the Potomac. The guidelines will hopefully provide that consistency. The Chesapeake Bay Program will make sure that trades are fair and equitable. Blue Plains is the only point source in the District, so they may need to look at Virginia to trade.

## Fundamental Principle #7:

**Question:** In cases where a party doesn't meet their permit requirements, can they buy credits to trade to meet those limits?

**Answer:** Permit levels need to be met; they are not the same as the Bay Program nutrient goals. Trading may be used to help set permit limits, but once they're established they need to be met. But trading can be an incentive. If for instance you have to install technology to meet a permit limit, you may have a couple options. If they install the one that gets more reductions, then they will have credits to trade. Pennsylvania may take a commission out for the benefit of the Commonwealth to retire credits.

### **III. Guidelines for Identifying Nutrient Reduction Goals**

**Question:** Please clarify the purpose of the trading program; to gain nutrient reductions?

**Answer:** It's to assist sources, non-point and point, in meeting water quality goals.

**Question:** The document says sources could get credits for only N or P?

**Answer:** The Negotiation Team does not recommend cross-pollutant trading, at least not in the beginning.

**Question:** Are there goals to set up trading in the Chesapeake 2000 Agreement?

**Answer:** The C2K Agreement says to work towards de-listing the Bay by 2010. Chlorophyll A, DO, and water clarity will be the indicators used to establish what it means to have a healthy bay. States will need to develop strategies to reach the load caps. Trading can be a tool to reach and maintain these caps.

### **IV. Guidelines for Determining Eligibility**

**Question:** Please give a scenario of how a farmer can accumulate credits?

**Answer:** There are a minimum number of BMPs that must be in place as part of a Nutrient Management Plan. But other BMPs that are not required could be used toward credits. No government money can be used to create credits, only what the farmer does beyond that.

**Question:** What about a developer that has land next to a river?

**Answer:** Development in general creates a lot of runoff, but they are required to retain some of this. But if they perhaps retired essentially 50 acres to remain forested, and also put in additional buffers, those activities could be put towards credits.

**Question:** Is a farm or POTW that closes down eligible to trade? There are definite reductions. If they do get credits, how long are they valuable?

**Answer:** The document doesn't address this situation specifically.

**Question:** What if a developer takes that closed farm and builds on it, but is getting an overall improvement in pollution discharges, is that amount tradable? A buy-out could be economically and environmentally sound, but how long do the credits last?

**Answer:** This is not addressed in the document.

## V. Guidelines for Performing Trade Administration

**Question:** How will economical values be determined? by WRI projects?

**Answer:** This will be an interesting aspect to see out of the state programs. Right now, we don't know how much a credit is worth. The value will evolve as the market evolves.

**Question:** Do you have numbers that you are recommending for ratios?

**Answer:** For uncertainty ratios, the recommended range is from ½:1 to 3:1. These numbers are used across the nation in present programs. Water quality ratios would use the numbers from the Watershed Model in respect to delivery. In other programs, the common retirement ratio is 5-10%. The Negotiation Team did not specify the special needs ratio.

**Question:** What kind of enforcement mechanism would be in place if reductions were not met after annual monitoring?

**Answer:** There will be penalties if an agreement is not adhered to. Some brainstorming has been done on this topic. One option is to have a general permit that would be the framework of an agreement between two parties, signed by them with the details of the trade. Under that, Pennsylvania would have enforceability. Penalties would be enforced similar to other permits. There needs to be some instrument to ensure compliance.

**Question:** How will the loading share for property owners along a river be allocated for non-point source?

**Answer:** That level of detail has not been worked out. The draft guidelines do not cover specific calculations of loads, but there is a lot of information out there to help the states in developing their program.

**Question:** Please help clarify the actual buying and selling. Would a point source give money to a non-point source?

**Answer:** This can work in a number of ways. One example would be a WWTP giving a farmer money to put in a BMP or a buffer. This would result in an overall reduction of pollutants into the waterway. Another option would be banking. In banking, you could post what you want to see and the bank does it.

## VI. Guidelines for Ensuring Accountability

**Question:** The numbers are annual, are there seasonal fluctuations that will be considered?

**Answer:** Yes. There will be a yearly accounting basis, but monitoring and reporting will be done on a monthly basis with point sources. Non-point sources will have certified individuals agreeing to the reductions that dischargers are reporting. The states will be responsible for water quality monitoring and overall program assessment, especially with the non-point source arena.

**Question:** In Pennsylvania, will there be an evaluation of a pilot program before expansion and implementation?

**Answer:** Pennsylvania is hoping to have a pilot project on a small watershed before it is taken to the Susquehanna. Accountability is an important element of trading. There needs to be a way to ensure that the trades are real. We want to see ambient water quality improvement prior to expansion. The small watershed that will be chosen, will most likely have a TMDL problem and will serve as an educational tool. In order for this to work though, there needs to be public participation and involvement. The key in the development and administration of a trading program will be public trust.

## VII. Guidelines for Assessing Progress

**Question:** If a sewage plant builds a wetland to offset their loads, how many years is that permissible?

**Answer:** Annual offsets will need to be developed.

## VIII. Guidelines for Stakeholder Involvement

**Question:** There is public participation in the design of a program, but will there be for individual trades?

**Answer:** Public participation will be encouraged for both. A Trade Certification Form would be signed with authority to ensure correct information and filed where it will be accessible to the public.

**Question:** Will there be public hearings like with NPDES permits?

**Answer:** Public involvement and how it will work needs to be explored further. There needs to be some availability to comment on proposed trades, perhaps by posting the trades. This will need to be built into the process. This will not be like the NPDES permits though. The trading "permit" will really be a contract, enforced by a third party (PA DEP).

## IX. General Comments

**Question:** What are the incentives/circumstances to purchasing credits?

**Answer:** Pennsylvania will be implementing nutrient goals. Everyone will have a specific allocated load. If everyone helps to pay for a new technology and reduction is met, everyone wins. Pennsylvania's intent is to have a demonstration project and possibly do trading statewide, not just within the Chesapeake Bay watershed. A municipality that needs to expand due to

population growth may find themselves in a position of needing credits to accommodate growth. Although their loads will increase, the overall loading will not when purchasing credits.

**Question:** When Pennsylvania develops their program, will it have to satisfy the EPA framework for trading document?

**Answer:** It's a resource that could be used.

**Question:** What is the driving force behind trading? Unless there are TMDLs, there are no regulations in place.

**Answer:** All states are working on cap maintenance strategies to meet and maintain the 40% reduction load. In Maryland, all major WWTPs have a goal of 8 mg/l. There are a few that can't get to 8. Trading would allow them to buy from a facility that is getting 5. That facility would benefit from the cost of the credits.

## **X. Grammatical/Editorial Comments**

### **MAJOR CONCLUSIONS**

In general the audience was grasping for more detail which will not be available until the states implement their individual trading programs. The guidance document outlines a general plan that currently accommodates signatory state differences.



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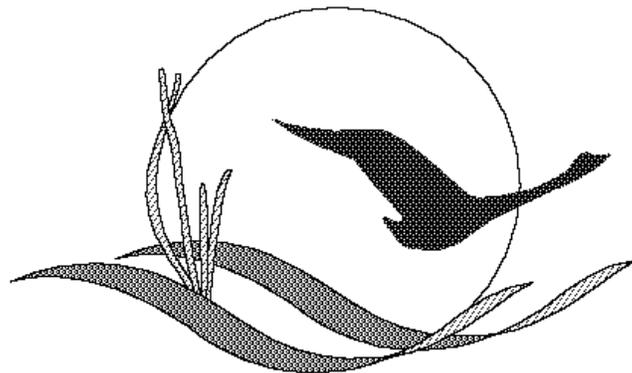
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***NUTRIENT TRADING***  
*In the*  
*Chesapeake Bay Watershed*

***Public Meeting Proceedings***  
**WSSC, Laurel, MD**  
**September 26**  
**2-4pm**



**Prepared by:**  
**Katrin O'Connell**

**INTRODUCTION**

The public workshops provided an opportunity for public review and comment on the Draft Nutrient Trading Guidance Document which was written by the Nutrient Trading Negotiation Team, a group composed of a wide array of interested stakeholders from across the Chesapeake Bay watershed. The guidance document presents fundamental principles and guidelines for nutrient trading derived by the Negotiation Team after detailed deliberation and a consensus based process over the course of a year. This public workshop, one of 16 total throughout the Chesapeake Bay watershed, was held at the Washington Suburban Sanitary Commission (WSSC) on September 26, 2-4 pm. There were approximately 22 participants and their major questions and concerns are presented in detail below (*categories follow the guidance document table of contents*):

**DISCUSSION**

Allison Wiedeman, of EPA's Chesapeake Bay Program Office, presented a 45 minute summary of major outcomes of the negotiation team's deliberations and conclusions of the guidance document.

**I. Definitions**

None

**II. Fundamental Principles (summarize according to #'s 1 – 8)**Fundamental Principle #5

**Question:** Do you think nutrient trading will stop people from going to higher reductions, if there is not a demand for the credits?

**Answer:** The fundamental principles demand that you must do what you can to get to the 40% reduction first. Specific entry rules are set up in order to participate. These are listed in the document.

Fundamental Principle #6

**Comment:** In Maryland there will not be much left to trade. There are very strong feelings about restricting trades only to river basins in this state. It might be important to educate and get people more comfortable with this concept.

**III. Guidelines for Identifying Nutrient Reduction Goals**

**Question:** Currently trades are set up on a pound – pound basis. Where would you foresee a situation where things could change in the future – will the 40% be moved and lowered?

**Answer:** Trading should be flexible. Trading is not really an attainment tool, but as a tool to achieve and maintain a goal. Its biggest role could be for offsetting growth.

**Concern:** Transaction costs can be made so high that any financial value can be lost. Cost of transaction is going to exceed trade cost. The Maryland WERF project, currently underway, will give us an idea of potential market in Maryland. Trading will probably take states 3-4 years to

implement. At that time it might be necessary to reevaluate trading and some of the recommended guidelines. The overall concern was voiced that trading might be too restrictive as described in the guidance document.

**Question:** When calculating the 40% reductions in the signatory states, are all state using the same mathematical model for calculating load allocation? When examining local water quality, for example, are you looking at state science and models which might be slightly different.

**Answer:** The Bay Program is looking at watershed wide allocations.

#### **IV. Guidelines for Determining Eligibility**

**Question:** Who would a POTW trade with?

**Answer:** Trading partners have to be in the same basin.

**Question:** What about grants in the case of sewage treatment plants? At what point would you be eligible to trade?

**Answer:** You couldn't trade if you got grants to achieve 8, but if you could go down as low as 5, that could count as a credit. If you got grant funding, however, to go to three – that doesn't count.

**Question:** How does local government fit into this process? Stormwater, etc. Are there credits involved?

**Answer:** This needs to be further discussed. If activities are not in the NPDES permits, it could be creditable.

**Question:** In the Patuxent or anywhere, can a homeowners association, lawn service, etc.. generate credits?

**Answer:** The guidance document is trying not to exclude a potential source. A "discharger" can be any source, but it has to accept its nutrient allocation and has to go beyond that goal in order to generate credits.

**Question:** What is the smallest entity that can trade?

**Answer:** That is a very important question and is not really addressed in the guidance document. In the urbanized areas, for example, it would be lawns.

**Question:** Could a nonpoint source, for example a stormwater utility, get credit for a BMP? Or is it part of a pre-existing system?

**Answer:** The Negotiation Team tried to define a baseline for a stormwater system, but decided that each state will have to make this determination. Perhaps if you make lots of improvements that aren't required, but will generate credits.

#### **V. Guidelines for Performing Trade Administration**

**Question:** How do you measure loads from nonpoint sources? How is the baseline established before certain sources can trade?

**Answer:** The guidance document recommends that each state should decide this, since the answer would be different for each state. The negotiation team also recommends using uncertainty ratios in estimating nonpoint source loads.

**Question:** Certain areas or waterbodies that are heavy in nutrients – everything has been done to reduce nutrients in that area. If a facility can reduce further, can they be given several credits?

**Answer:** Again ratios can be used. It is up to each state program to set up these ratios. The more polluted the water body, the more valuable a reduction would be to a seller. Also, TMDLs will reflect that the waterbody is more degraded.

## **VI. Guidelines for Ensuring Accountability**

**Question:** Once trades are set up, what happens when a seller goes out of compliance?

**Answer:** The guidance document says that buyer of credits is the responsible party. There is legal recourse if the credit is not maintained. The contract is set up between buyer and seller – there are severe penalties if the seller defaults. Also, the guidelines recommend that states give the buyer adequate time to respond and find new credits.

**Question:** What would be the retribution if someone is cheating?

**Answer:** Once you enter into a trade you are legally bound by a contract to uphold your end of the bargain.

**Question:** What kind of oversight will there be? Is EPA or is anyone ensuring that caps are met?

**Answer:** Again, specifics are determined by each state, but each state has NPDES authority and EPA will have an oversight role.

## **VII. Guidelines for Assessing Progress**

**Question:** Are you anticipating that there is a one-time purchase – or is it on an annual basis?

**Answer:** The guidelines recommend that trades are set up on a yearly purchase basis with monthly monitoring to verify that credits are being maintained. In the case where there is a 3-5 year longterm arrangement an annual payment will be required. The air program, for example, sets up trades in some cases for perpetuity.

**Question:** Certification of credits. What kind of turn-around time is needed?

**Answer:** Each state has to pick up implementation vehicles (this depends on how the process happens). Perhaps during the permitting process. Again, this will be state specific.

**Question:** If credits are issued on an annual basis, are new technologies taken into account as they become available? Is there a reevaluation process to decide if they need to buy credits?

**Answer:** Yes, but specifics are left to the states to decide.

## **VIII. Guidelines for Stakeholder Involvement**

None

## IX General Comments

**Question:** what would make someone want to be part of a voluntary program? Can see a credit generator, but why would people want to buy credits?

**Answer:** A buyer might need to offset increased loadings by purchasing credits from another industry or from an agricultural entity. In the interim it would be cheaper to purchase credits than to install expensive upgrades.

**Question:** Under current conditions, is the supply higher than the demand?

**Answer:** Maybe that is the case currently, but think down the road when you have increased flow due to population increases. The value of trading increases as time goes on. The hammer is a political commitment to maintain the cap. All 64 treatment plants in the Bay are working toward cap strategies (we will need to live with an allocation once it is provided).

**Explanation:** All of the signatory states were represented on negotiation team and the guidance document needed to accommodate very different situations in the other states. Maryland has come farther than the other states have in certain reductions. Many members felt that maybe the guidance was overly restrictive in this state and perhaps it would be tough to do a one-size-fits-all setup. Consensus document – needed to represent everyone’s concerns.

**Question:** Let’s look at this scenario: In an urbanized area a plant gets down below 8, however loadings to the local water body are changing and increasing (possibly due to a nonpoint source). What happens in that situation?

**Answer:** This is considered an offset situation, which is not really being addressed by the nutrient trading team. This applies more to the cap strategy and needs to be addressed by the cap strategy workgroup.

**Question:** If a chicken processor decides to shut down, do they get a 1 year credit or is it perpetuity?

**Answer:** This type of situation is not addressed in the document. Each state will have to make this decision when implementing their trading program.

**Question:** Are there real life examples of real life trades?

**Answer:** Yes, examples were examined from other programs around the country to set up the guidance document.

**Statement from MAMWA:** Mike Bunk, MAMWA – dedicated to protecting public health – in general MAMWA is pleased with the draft guidance and efforts to develop trading program. It will be a critical tool for local and state watershed program and supports this effort. The following are suggestions for refinement: Don’t overload the trading process. Low transaction barriers and prohibition of inter-basin trading should be reexamine. MAMWA wholeheartedly supports this effort. MAMWA plans to submit several comments in writing before public comments are finished.

**Question:** If a community generates a credit, can it sell it within the community?

**Answer:** This would be considered an offset. That would be a cap/allocation issue.

**X. Grammatical/Editorial Comments**

None

**MAJOR CONCLUSIONS**

In general the audience was grasping for more detail which will not be available until the states implement their individual trading programs. The guidance document outlines a general plan that currently accommodates signatory state differences. There was concern that limiting trading to river basins would be too restrictive, particularly in Maryland. Participants requested that the Negotiation Team reexamine this restriction.



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***NUTRIENT TRADING***  
*In the*  
*Chesapeake Bay Watershed*

***Public Meeting Proceedings***  
**Washington Suburban Sanitary**  
**Commission (WSSC)**  
**Laurel, MD**  
**September 26, 2000**  
**7-9 pm**



**Prepared by:**  
Katrin O'Connell

**INTRODUCTION**

The public workshops provided an opportunity for public review and comment on the Draft Nutrient Trading Guidance Document which was written by the Nutrient Trading Negotiation Team, a group composed of a wide array of interested stakeholders from across the Chesapeake Bay watershed. The guidance document presents fundamental principles and guidelines for nutrient trading derived by the Negotiation Team after detailed deliberation and a consensus based process over the course of a year. This public workshop, one of 16 total throughout the Chesapeake Bay watershed, was held at the Washington Suburban Sanitary Commission (WSSC) on September 26, 7-9 pm. Attendance was light with only 5 participants, but a good question and answer session followed the main presentation. Some major questions and concerns are presented in detail below (*categories follow the guidance document table of contents*):

**DISCUSSION**

Allison Wiedeman, of EPA's Chesapeake Bay Program Office, presented a 45 minute summary of major outcomes of the negotiation team's deliberations and conclusions of the guidance document.

**I. Definitions****II. Fundamental Principles (summarize according to #'s 1 – 8)**Fundamental Principle #6

**Question:** Within a county you have both the Potomac and the Patuxent. Is there flexibility in Principle #6?

**Answer:** These are the recommendations that were derived through a difficult consensus-based approach and will be challenging to change. The Negotiation Team will examine all the public comments at their November meeting and may have an opportunity to discuss this point and reach a compromise.

**III. Guidelines for Identifying Nutrient Reduction Goals**

**Question:** Regarding TMDLs and NPDES permits – what is EPA's response to putting together trading prior to having these in place.

**Answer:** The trading program that each of the states sets up will have to accommodate for these regulations and take them into account when the time comes.

**Question:** Why limit trading to achieve to "like" dischargers. In Maryland the the 40% reduction goal will most likely be achieved earlier than in any other state.

**Answer:** The Negotiation Team will take this recommendation into account at their November meeting.

**Question:** What is meant by the 40% reduction goal?

**Answer:** Each state will have to get into the specifics of this and make their own definitions

**Question:** Does achieve mean for all individual facilities, the basin, the state?

**Answer:** This was purposely left vague in the guidelines. Individual states need to decide this.

**Question:** Are there credits for other nutrients if you are decreasing one and you get an automatic reduction in another.

**Answer:** This was not considered by the Negotiation Team, but would be good to examine. Again, states will need to decide this.

#### **IV. Guidelines for Determining Eligibility**

**Question:** If a certain percentage of cost share is paid for by a farmer, can he trade the portion that he paid for?

**Answer:** Yes. The trade would have to be certified by an overseeing agency before it became final.

#### **V. Guidelines for Performing Trade Administration**

**Question:** Do the guidelines take into account wet years and dry years?

**Answer:** Yes, there can be a range of ratios depending on the type of year it is.

#### **VI. Guidelines for Ensuring Accountability**

None

#### **VII. Guidelines for Assessing Progress**

None

#### **VIII. Guidelines for Stakeholder Involvement**

None

#### **IX. General Comments**

**Question:** Are trading programs functionally the same depending on the state?

**Answer:** Yes, states would need to design their own programs and provide the market place. All sources need to meet general criteria before they can trade.

**Recommendation:** It might be nice to have a game to look at rules or actual examples of trades online.

**Answer:** An example of this already exists at: [www.nutrientnet.org](http://www.nutrientnet.org)

**X. Grammatical/Editorial Comments**

None

**MAJOR CONCLUSIONS**

In general the audience was grasping for more detail which will not be available until the states implement their individual trading programs. The guidance document outlines a general plan that currently accommodates signatory state differences. There was concern that limiting trading to river basins would be too restrictive, particularly in Maryland. Participants requested that the Negotiation Team reexamine this restriction. Another interesting issue was brought up that was not considered by the Negotiation Team: If you reduce one nutrient and inadvertently have a reduction in another nutrient, is the second nutrient tradeable?



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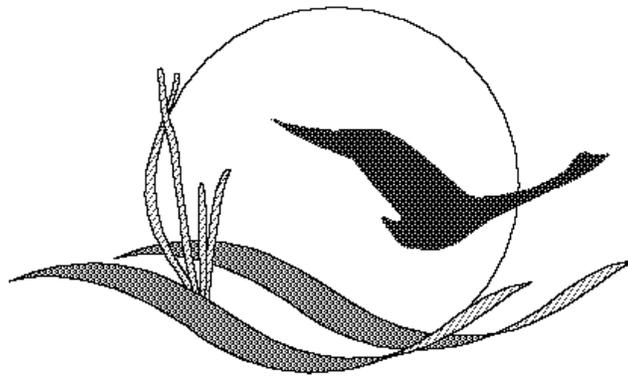
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***NUTRIENT TRADING***  
*In the*  
*Chesapeake Bay Watershed*

***Public Meeting Proceedings***  
**Hagerstown Community College**  
**Hagerstown, MD**  
**September 27, 2000**



**Prepared by:**  
Katrin O'Connell

## INTRODUCTION

The public workshops provided an opportunity for public review and comment on the Draft Nutrient Trading Guidance Document which was written by the Nutrient Trading Negotiation Team, a group composed of a wide array of interested stakeholders from across the Chesapeake Bay watershed. The guidance document presents fundamental principles and guidelines for nutrient trading derived by the Negotiation Team after detailed deliberation and a consensus based process over the course of a year. This public workshop, one of 16 total throughout the Chesapeake Bay watershed, was held at Hagerstown Community College on September 27, 7-9 pm. Attendance was light at this public workshop with only 5 participants. Their major questions and concerns are presented in detail below (*categories follow the guidance document table of contents*):

## DISCUSSION

Cy Jones, of the Washington Suburban Sanitary Commission, presented a 45 minute summary of major outcomes of the negotiation team's deliberations and conclusions of the guidance document.

### I. Definitions

**Question:** Simplify a transaction. Explain a trade and how the buyer and seller take part in the trade.

**Answer:** Nutrient trading is the transfer of nutrient reduction credits, specifically nitrogen and phosphorus between buyers (entities that off nutrient credits for sale). Credits become available when a seller has reduced its nutrient load below what it is allowed to discharge to the receiving water body.

### II. Fundamental Principles (summarize according to #'s 1 – 8)

None

### III. Guidelines for Identifying Nutrient Reduction Goals

None

### IV. Guidelines for Determining Eligibility

None

### V. Guidelines for Performing Trade Administration

**Question:** What is the process? Is there additional opportunity for public input?

**Answer:** The process is described in detail in the document. Each state will set up specifics when implementing their own trading program. Each trade will be subject to

public review and comment.

## **VI. Guidelines for Ensuring Accountability**

**Question:** Who will be the watch dog?

**Answer:** The trading agreement will be enforceable by the state. The Negotiation Team strongly recommends that trades should be governed by a state general permit or regulation issued under the state's water quality laws and that the public will be provided the opportunity for input prior to the execution of a trade. Also, tributary teams will be involved in setting up trading in each state.

## **VII. Guidelines for Assessing Progress**

None

## **VIII. Guidelines for Stakeholder Involvement**

None

## **IX. General Comments**

None

## **X. Grammatical/Editorial Comments**

None

## **MAJOR CONCLUSIONS**

In general the audience wanted basic information on what trading is and how it works. There was no discussion of recommended changes to the document or the concept of trading.



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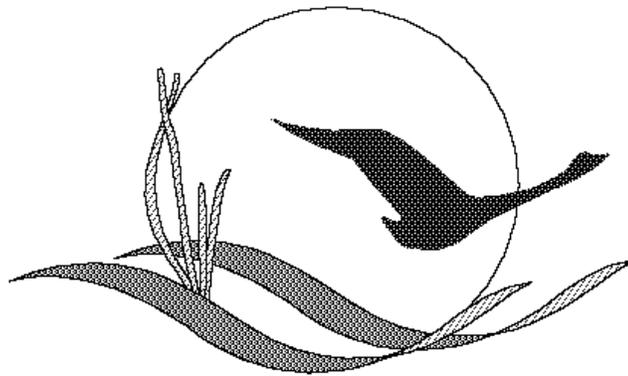
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***NUTRIENT TRADING***  
*In the*  
*Chesapeake Bay Watershed*

***Public Meeting Proceedings***  
**Salisbury State**  
**Eastern Shore, MD**  
**September 29, 2000**



**Prepared by:**  
John Rhoderick

## INTRODUCTION

The public workshops provided an opportunity for public review and comment on the Draft Nutrient Trading Guidance Document which was written by the Nutrient Trading Negotiation Team, a group composed of a wide array of interested stakeholders from across the Chesapeake Bay watershed. The guidance document presents fundamental principles and guidelines for nutrient trading derived by the Negotiation Team after detailed deliberation and a consensus based process over the course of a year. This public workshop, one of 16 total throughout the Chesapeake Bay watershed, was held at Salisbury State University, Salisbury, Maryland from 7-9 pm. Their major questions and concerns raised by participants are presented in detail below (*categories follow the guidance document table of contents*):

## DISCUSSION

John Rhoderick, of the Maryland Department of Agriculture, presented a 45 minute summary of major outcomes of the negotiation team's deliberations and conclusions of the guidance document.

### I. Definitions

None

### II. Fundamental Principles (summarize according to #'s 1 – 8)

None

### III. Guidelines for Identifying Nutrient Reduction Goals

None

### IV. Guidelines for Determining Eligibility

**Comment:** Speaker was 1) not in favor of not using cost shared operations. If you can operate better than the cost share, why can't they be included? What about loan monies? half of the cost share is put out by the plant. 2) Why no cross division of trades, i.e. between point sources and nonpoint sources if goals can be achieved? What if you get it to 0?

**Comment:** Are all Nutrient Management plans going to be the same among the States?

**Comment:** Are we going to penalize Maryland farmers because they have Nutrient Management plans before other State's farmers?

**Comment:** Will farms in Green Branch be able to trade credits?

**Comment:** A proposal was offered - BMPs may be installed prior to trade or put up for trade prior to installation.

**V. Guidelines for Performing Trade Administration**

**Comment:** If Maryland goes forward with this, who will be the lead agency? Response was MDE would have to have a role since this involves regulatory/enforcement authority.

**VI. Guidelines for Ensuring Accountability**

None

**VII. Guidelines for Assessing Progress**

None

**VIII. Guidelines for Stakeholder Involvement**

None

**IX. General Comments**

**Comment:** Why isn't millions of pounds broken down into acres?

**Comment:** When you determine point source, does it include such things as sewage spills?

**Comment:** Focus removal systems rather than filtering. Oysters eat algae. Can oyster beds get credit for the filtering they do? Need to replenish oysters and filtering, feeding fish.

**Comment:** It takes 1 pound of nutrients to raise a bushel of corn. Using what corn uses vs what farmer applies, corn will take out more than put on. Can difference be sold as a credit? What farmers have to sell?

**Comment:** Bottom line - Nutrient is completely voluntary?

**Comment:** What is time-frame to implement if Bay Program blesses it? Response was approximately 2 years.

**Comment:** Might want to put in point source before ag is entered into it.

**X. Grammatical/Editorial Comments**

None



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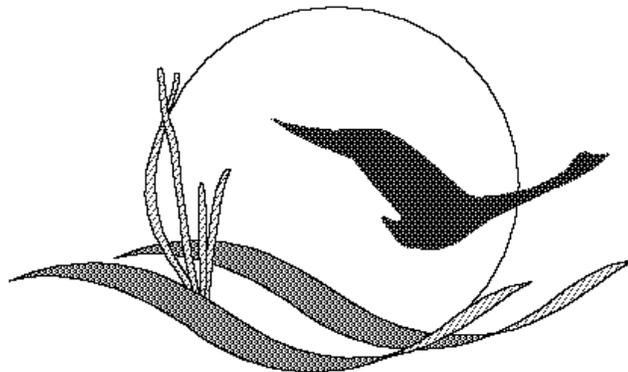
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***NUTRIENT TRADING***  
*In the*  
*Chesapeake Bay Watershed*

***Public Meeting Proceedings***  
**Martin Luther King Library**  
**Washington, DC**  
**October 10, 2000**  
**6:30-8:30 pm**



**Prepared by:**  
Katrin O'Connell

## INTRODUCTION

The public workshops provided an opportunity for public review and comment on the Draft Nutrient Trading Guidance Document which was written by the Nutrient Trading Negotiation Team, a group composed of a wide array of interested stakeholders from across the Chesapeake Bay watershed. The guidance document presents fundamental principles and guidelines for nutrient trading derived by the Negotiation Team after detailed deliberation and a consensus based process over the course of a year. This public workshop, one of 16 total throughout the Chesapeake Bay watershed, was held at the Martin Luther King Library in Washington, DC on October 10, 6:30-8:30pm. Attendance was light with only 6 participants, but a good question and answer session followed the main presentation. Some major questions and concerns are presented in detail below (*categories follow the guidance document table of contents*):

## DISCUSSION

Allison Wiedeman, of EPA's Chesapeake Bay Program Office, presented a 45 minute summary of major outcomes of the negotiation team's deliberations and conclusions of the guidance document.

### I. Definitions

None

### II. Fundamental Principles (summarize according to #'s 1 – 8)

None

### III. Guidelines for Identifying Nutrient Reduction Goals

**Question:** In 2003 the nutrient criteria will be reset. How does this work with nutrient trading?

**Answer:** Trading can help with meeting water quality standards (no matter what the limits are).

**Question:** How does trading create incentives for treatment plants going lower than the current 8.0 lb limit

**Answer:** If the limit of technology is 5.0 lbs/liter, there is economic incentive to go lower than 8.0.

**Question:** Water clarity, DO, chlorophyll a – What numbers would indicate that the Bay is getting healthier?

**Answer:** Currently N-P caps are being used to meet all three criteria.

## IV. Guidelines for Determining Eligibility

**Question:** What treatment plants trade if cost shares were used to achieve reductions? Maybe this needs to be clarified in the document. It's not additional capital, just operation costs to bring it down to 5.5lbs.

**Answer:** Yes, they should be able to trade if they get to 5.5 lbs, since the upgrade was only meant to bring them to 8 lbs.

**Question:** Could non signatory states trade?

**Answer:** Non signatory states need to meet similar boundaries and reductions prior to generating credits. Good actors are rewarded.

## V. Guidelines for Performing Trade Administration

**Question:** When issuing state general permits – is the public notified?

**Answer:** Yes, a notice will be covered under a general permit. The traders fill out forms and the public could request a hearing to review the trade.

## VI. Guidelines for Ensuring Accountability

None

## VII. Guidelines for Assessing Progress

None

## VIII. Guidelines for Stakeholder Involvement

## IX. General Comments

**Question:** Cross nutrient trading – is it possible?

**Answer:** There is not a provision for it in the document and the Negotiation Team did not consider it, but each state has to set up its own plan for nutrient trading, which could include cross nutrient trading.

**Question:** Are there other programs around the country?

**Answer:** Yes, there are at least 30 program, with 10 that have administered actual trades.

**Comment:** The document is written a little “fuzzy” because states need to develop individual programs. The guidelines are kept general to cover differences between states.

**Comment:** A provision to trade with another state needs to be added in to the document (for example, in the Potomac basin).

**Recommendation:** Develop model regulations that the states can use. Each state has ideas for a pilot. Is there a market in Maryland? Pennsylvania? Hire an organization to pilot trades in the basin. There needs to be consistency across the region.

## **X. Grammatical/Editorial Comments**

### **MAJOR CONCLUSIONS**

In general the audience was grasping for more detail which will not be available until the states implement their individual trading programs. The guidance document outlines a general plan that currently accommodates signatory state differences. There was concern that limiting trading to river basins would be too restrictive, particularly in Maryland. Other interesting issue that should be considered by the Negotiation Team, included: Is cross-nutrient trading a possibility? Model regulations should be developed that the states can use in putting together pilot trades as programs are being developed.



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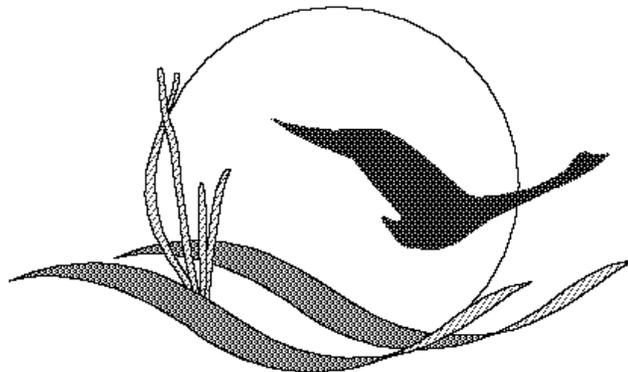
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***NUTRIENT TRADING***  
*In the*  
*Chesapeake Bay Watershed*

***Public Meeting Proceedings***  
**Bridgewater Retirement Center**  
**Bridgewater, VA**  
**September 26, 2000**  
**10-12 am**



**Prepared by:**  
Bill Leary

## INTRODUCTION

The public workshops provided an opportunity for public review and comment on the Draft Nutrient Trading Guidance Document which was written by the Nutrient Trading Negotiation Team, a group composed of a wide array of interested stakeholders from across the Chesapeake Bay watershed. The guidance document presents fundamental principles and guidelines for nutrient trading derived by the Negotiation Team after detailed deliberation and a consensus based process over the course of a year. This public workshop, one of 16 total throughout the Chesapeake Bay watershed, was held at the Bridgewater Retirement Center, Bridgewater, VA on September 26 from 10-12am. Some major questions and concerns raised by participants are presented in detail below (*categories follow the guidance document table of contents*):

## DISCUSSION

Waldon Kerns, of the Virginia Polytechnic Institute, presented a 45 minute summary of major outcomes of the negotiation team's deliberations and conclusions of the guidance document.

### I. Definitions

None

### II. Fundamental Principles (summarize according to #'s 1 – 8)

**Comment:** Flexibility in changing the Fundamental Principals should be allowed.

### III. Guidelines for Identifying Nutrient Reduction Goals

None

### IV. Guidelines for Determining Eligibility

**Comment:** Eliminating that portion of nutrients reduced thru the receipt of grants severely reduces the trading potential and potential improvement to the Bay. Consider the fact grant funds are taxpayer money derived from the majority of the people who live in the area tributary to the Bay and who benefit directly from improvements to the Bay.

**Comment:** The additional operating costs associated with nutrient reduction should be added to the capital costs to determine the nutrient credits that can be used for trading.

**Comment:** Should have enforceable caps to push trading.

**Comment:** Restricting trade between like sources restricts potential environmental benefits. Trading should be opened up to allow trading between point and non-point sources in the beginning.

**Comment:** The most cost effective nutrient controls may be non-point sources. Trading should be allowed initially between point and non-point sources.

**Comment:** How is the equitability of who can buy a credit addressed? Those who have the money in the metropolitan areas can outbid those in the rural areas who have the same if not a more pressing need.

**Comment:** The goal for the Shenandoah could be reached by non-point source reductions only. The goal for the Potomac required that point sources install nutrient reduction that forced the Shenandoah point sources into nutrient reductions. This results in an uneven playing field in the future for the point sources in the Shenandoah. Credits should be allowed for these reductions when considering trading.

## V. Guidelines for Performing Trade Administration

**Comment:** Minimize the involvement of State government in the trading process. Burdensome oversight and rules will add to the administrative costs reducing the potential for trading. Let trading be truly market driven.

**Comment:** Promote trading by developing a market driven system not a government-regulated program.

**Comment:** Allow the market price to drive trades.

**Comment:** State should fund a bank to ensure liquidity in the market place and to guarantee a ready buyer for the credits.

**Comment:** Ratios should be specified.

**Comment:** Should have enforceable caps to push trading.

**Comment:** Restricting trade between like sources restricts potential environmental benefits. Trading should be opened up to allow trading between point and non-point sources in the beginning.

**Comment:** The most cost effective nutrient controls may be non-point sources. Trading should be allowed initially between point and non-point sources.

## VI. Guidelines for Ensuring Accountability

**Comment:** Monitoring 12 times per year or more is burdensome and not cost effective.

**Comment:** Trading with the Shenandoah Valley point and non-point sources should not be allowed.

**Comment:** Value of a credit should be set Basin wide.

## **VII. Guidelines for Assessing Progress**

None

## **VIII. Guidelines for Stakeholder Involvement**

## **IX. General Comments**

None

## **X. Grammatical/Editorial Comments**

None



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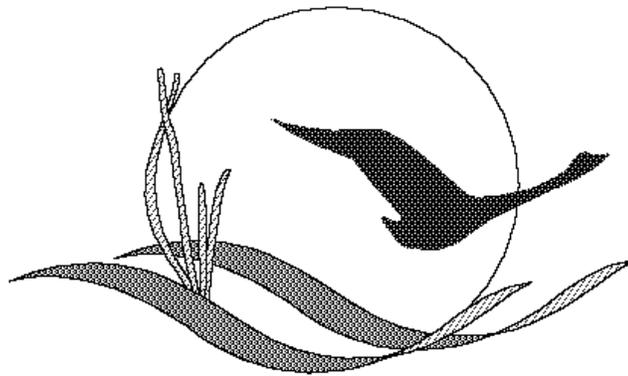
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***NUTRIENT TRADING***  
*In the*  
***Chesapeake Bay Watershed***

***Public Meeting Proceedings***  
**Manassas, VA**  
**September 28**  
**2-4pm & 7-9pm**



**Prepared by:**  
Julie Trask

## INTRODUCTION

The public workshops provided an opportunity for public review and comment on the Draft Nutrient Trading Guidance Document which was written by the Nutrient Trading Negotiation Team, a group composed of a wide array of interested stakeholders from across the Chesapeake Bay watershed. The guidance document presents fundamental principles and guidelines for nutrient trading derived by the Negotiation Team after detailed deliberation and a consensus based process over the course of a year. These public workshops were held in Manassas, Virginia on September 28 from 2-4 p.m. and 7-9 p.m.. Combined, there were 14 participants. Their major questions and concerns are presented in detail below (*categories follow the guidance document table of contents*):

## DISCUSSION

John Kennedy presented a 45 minute summary of major outcomes of the negotiation team's deliberations and conclusions of the guidance document. Along with John Kennedy, Waldon Kerns was available during the 2-4 p.m. session and Bill Leary was available for the 7-9 p.m. session.

### I. Definitions

None

### II. Fundamental Principles (summarized according to #'s 1 – 8)

None

### III. Guidelines for Identifying Nutrient Reduction Goals

**Question:** You said point sources could trade to achieve, but you said that you had to reach 40% first?

**Answer:** Review the definition of a credit. Credits are the amount of nutrients reduced below a given source's allowable discharge. Trading allows dischargers to purchase credits at a lower cost than installing controls, while providing an equivalent or greater reduction in loading from another source.

### IV. Guidelines for Determining Eligibility

**Question:** In a Virginia program, with point source to point source trading, if 8mg/l is the target, do you see selling credits if they can go down to 5 mg./l?

**Answer:** Yes, if they are exceeding performance expectations. This is an incentive to get reductions.

**Question:** For non-point sources, how do you envision folks coming together?

**Answer:** The Soil & Water Conservation Districts could act as a clearinghouse for

credits. There needs to be an outreach method to expand the network to see who is out there and available to trade. Michigan is building a registry to allow people to see what's available and to post credits for sale. There are several ways this can be done.

**Question:** Can any farmer trade?

**Answer:** They must meet NRCS standards for Nutrient Management Plans, at a minimum.

**Question:** Is a farm that goes "dormat" allowed to trade? There will be a significant decrease in loads. And what if the land is kept as farmland and not developed – can that be another credit incentive? How are credits determined with non-point sources?

**Answer:** A farm that is retired may be eligible to trade, that hasn't been determined yet. As far as the determination of credits, in Virginia the Dept. of Conservation and Recreation relies on the Chesapeake Bay Program's model for reduction assumptions with BMPs, etc.

**Question:** Are only nitrogen and phosphorus credits eligible to trade?

**Answer:** Yes, those are the only elements that are being considered now.

**Question:** BMPs bought with cost-share dollars won't be eligible to trade?

**Answer:** If federal or state funds funded that credit, it would be discounted or pro-rated, to prevent getting double credit.

**Question:** Is a citizen group allowed to purchase credits for retirement?

**Answer:** If they have the money to do so.

**Comment on behalf of VAMWA:** The proposed guidelines would only allow credits to be generated from nutrient improvements paid for by local dollars. Unfortunately, this will severely curtail trading and decrease the incentive for those who have the ability to generate credits to either build additional facilities or operate them at a level that will achieve a higher removal.

## V. Guidelines for Performing Trade Administration

**Question:** How will non-point sources be monitored, and who's controlling that?

**Answer:** There will be yearly checks to make sure BMPs are operating properly. Spot checks will be difficult to carry out, so safety factors need to be built in. There are uncertainty ratios to account for the uncertainties in non-point reduction methods and measurements. We won't be able to have a 1:1 ratio from an ag. facility. The average hydrology over a year will also have to be considered.

**Question:** Will the sale of credits be left up to the market?

**Answer:** That is one notion. The states will have to establish some market system.

**Question:** Will VA DEQ administer the trading program?

**Answer:** It may, or it could be a commodities board, a citizens' group, etc.

**Comment on behalf of VAMWA:** To be successful, the program must be market driven. If excessive regulatory oversight and procedures are put in place, which result in unreasonable and burdensome cost, the program will die under its own weight and the Chesapeake Bay will be the loser.

**Comment:** Some allowance needs to be given for interstate trading, such as in the case of Blue Plains.

**Reply:** The guidelines will hopefully provide consistency across the jurisdictions.

## VI. Guidelines for Ensuring Accountability

**Question:** Will loadings be calculated on a monthly or yearly average?

**Answer:** Point Sources will calculate credits on a yearly accounting basis, but they will monitor and report on a monthly basis.

**Question:** Who's the jury in establishing standards and calibrations?

**Answer:** Point sources already have an ambient monitoring program in place. Monitoring of BMPs will be difficult. Spot checking will need to be done, and coordinated with local SCDs.

**Comment:** Would like to see the program enforceable by civil agreements, and not necessarily through the state.

**Reply:** A lot would depend on the wording of the contract between the two parties.

## VII. Guidelines for Assessing Progress

**Question:** What will the timeframe be on general permits?

**Answer:** It would probably be similar to the design life of BMPs. Contracts will probably be on a five-year maximum schedule.

## VIII. Guidelines for Stakeholder Involvement

**Question:** What if citizens have disapproval of a trade? If it's done through a private contract, how can the public do anything about it?

**Answer:** The public will be involved, possibly through public forums. The states would serve as an arbitrator.

## IX. General Comments

None

**X. Grammatical/Editorial Comments**

None



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***NUTRIENT TRADING***  
*In the*  
*Chesapeake Bay Watershed*

***Public Meeting Proceedings***

**Dominion Virginia Power**

**Richmond, VA**

**October 3**

**2-4pm & 7-9pm**



**Prepared by:**  
Jud White

## INTRODUCTION

The public workshops provided an opportunity for public review and comment on the Draft Nutrient Trading Guidance Document which was written by the Nutrient Trading Negotiation Team, a group composed of a wide array of interested stakeholders from across the Chesapeake Bay watershed. The guidance document presents fundamental principles and guidelines for nutrient trading derived by the Negotiation Team after detailed deliberation and a consensus based process over the course of a year. These public workshops were held at Dominion Virginia Power, in Richmond, VA on October 3, from 2-4 p.m. and 7-9 p.m.. Major questions and concerns of the participants are presented in detail below (*categories follow the guidance document table of contents*):

## DISCUSSION

Two sessions were held: 2 PM (25 attendees including state staff and NTNT members), and 7 PM (7 attendees including state staff and NTNT members). After the presentation made by Jud White on the Draft Guidelines Document, a Q&A period was held. Answers were given, where possible or appropriate, by the NTNT members present. The following notes are a general summary (not verbatim transcript) of questions and comments, and combine discussions from both meetings.

### I. Definitions

**Comment:** Watershed groups throughout the Bay drainage are very skeptical about the trading program elements, in particular the scale of the geographic scope (major watersheds). No other programs in the U.S. are this large. The inter-basin issues are very sensitive, and if this is allowed then Fundamental Principal #1 is in jeopardy.

### II. Fundamental Principles (summarize according to #'s 1 – 8)

**Comment:** The 40% reference isn't correct for VA's lower Bay tributaries (see Fundamental Principal #3). The guidelines should be specific to each tributary strategy and the nutrient and sediment reduction goals adopted in each.

**Comment:** Limit trades to within the same watershed – no cross-tributary trading (FP#6).

### III. Guidelines for Identifying Nutrient Reduction Goals

**Question/Comment:** When does the benchmark start for NPS to start in terms of credit generation? How to account for all voluntary BMPs? Why hold BMPs to federal standards? They all reduce loads (e.g., no-till farming). Requiring BMPs to meet stringent standards doesn't advance the state-of-the-art and doesn't foster innovation.

**Question:** Why the hesitancy to allow cross-source (i.e., PS to NPS) trading from the start?

**Answer:** We need to ensure that sizable load reductions occur in both the PS and NPS categories – don't want to diminish the expected contributions to the nutrient reduction effort identified in the tributary strategies. There's also a certain amount of uncertainty about the equivalency of PS and NPS reductions.

#### IV. Guidelines for Determining Eligibility

**Question:** If a point source is currently at 75-80% nutrient reduction and needs additional credits, can we trade?

**Answer:** Yes.

**Question:** If credits can only be generated through the expenditure of local dollars, then this removes an incentive. The program should be more flexible; should be allowed to generate credits using cost share.

**Answer:** The final programs haven't been established yet, and perhaps operation and maintenance costs can be included to some extent, if not the cost-share for capital expenses.

**Comment:** The funds expended are all local taxpayer investment, regardless of whether they're state, federal, or local government funds. Many BMPs provide the public with a benefit beyond the nutrient removal capability. I'd rather see my tax dollars go to a bigger-bang-for-the-buck and see all the funding go to multi-purpose projects.

**Comment:** Local tax dollars need to go to local water quality improvements – not far removed in another part of the Bay watershed. One example is the need to preserve open space in the local area.

**Comment:** What about federal facilities and installations? All their control actions are funded with federal dollars. Federal "internal" trading is the likely outcome if trading is allowed (e.g., riparian forest buffers in lieu of more stringent PS controls at a base or installation).

**Question:** A possible disincentive is allowing public access to farm plans for certification. Not everyone wants to make this information available.

**Answer:** Probably comes into play when credits are certified – not part of the public disclosure process.

**Comment:** Need to look at standards beyond NCRS for NPS controls, e.g., forestry and urban practices have different standards. Need to recognize that non-agricultural BMPs will be employed and are valuable.

**Comment:** Can land conservation serve as a trading element? For example, if active crop land is idled or put into pasture, can the nutrient reduction gained be a credit? We'll need to have better administration and disclosure about conservation easements.

#### V. Guidelines for Performing Trade Administration

**Question:** Can an environmental fund be created for use in a specific watershed(s) for use on watershed-based goals? Can \$ be paid into this fund for a locality to use in widescale water quality management programs? What flexibility will be designed into the program to have the locality act as broker of the trading program rather than the state?

**Answer:** Better time to ask these Q's during development of the state program. Guidelines were written to be inclusive, not overly restrictive or detailed. State programs will probably be structured to encourage multi-purpose projects that are locally based and supported.

**Question:** Would VA's program go through the VA Administrative Processes Act process for development (i.e., the formal regulation development process).

**Answer:** There are several options for trading administration – if regulations are developed then the APA will be followed.

**Comment:** VAMWA encourages the state to take the next step in forming the “market based incentives” program, referenced in the WQIF agreement provisions.

**Comment:** The program may have a lot of implications on other existing programs, i.e., if the trading incentives are greater than a current cost-share program, then some may wait and put off installing controls until the trades are available to increase profit or cost-share received.

**Comment:** Urban NPS – Phase II stormwater permit program is coming into play. What does this do to credits generated before a permit is issued?

**Comment:** Where voluntary trades are made, and the TMDL program comes into play later, the contractual trade arrangements should be structured to be revisited and possibly voided if new allocations must be made among all sources.

## **VI. Guidelines for Ensuring Accountability**

**Question/Comment:** How will annual inspections of BMPs be accomplished? Is this really feasible?

## **VII. Guidelines for Assessing Progress**

## **VIII. Guidelines for Stakeholder Involvement**

## **IX. General Comments**

**Comment:** Don't see how the state will develop this large scale trading program without going through the regulatory process and the accompanying full public involvement.

**Comment:** Need a thorough economic analysis of the potential for trading.

## **X. Grammatical/Editorial Comments**

## MAJOR CONCLUSIONS

In general, between the Manassass and Richmond meetings, these comments were heard:

- Citizen environmental groups are skeptical about the trading program; unsure that water quality can be protected throughout a watershed if nutrient loads are traded; question the enforceability and accountability of a voluntary program; trading may be a way for nutrient reduction responsibilities to be avoided by some sources.
- Wastewater treatment plant owners (e.g., VAMWA) are generally in favor of a trading program; it appears to be a viable means to offset future growth without unduly burdening point sources; program must be market driven to be successful – limit excessive regulatory oversight and procedures; question why trading credits can only be generated for improvements paid for by local dollars (i.e., if federal or state cost-share is involved in the reduction, then no credit is earned).
- Who will administer the program? How will credits be certified and control actions verified? How will state compliance checks and enforcement be accomplished – via a general permit or other enforceable document? How will nonpoint source reductions be measured/monitored?



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