

## New York’s Trading and Offset Programs Review Observations

### I. Summary of Program Characteristics and Regulatory Status

For the common trading program elements discussed in Appendix S of the Chesapeake Bay TMDL, Table 1 distinguishes between trading and/or offset provisions, categorizes the degree to which New York’s program addresses each element, and illustrates whether the program is designed to support Point to Point source transactions, Nonpoint to Point source transactions, Nonpoint to Nonpoint source transactions and/or Point source to Nonpoint source transactions.

Table 1. New York Trading and Offset Programs Summary Table

Element	Types of Transactions							
	Point Source to Point Source		Nonpoint Source to Point Source		Nonpoint Source to Nonpoint Source		Point Source to Nonpoint Source	
Trading (T) /Offset(O)	T	O	T	O	T	O	T	O
1.Authority	●	○	○	○	○	○	○	○
2. Baselines (for a credit generator)	○	○	○	○	○	○	○	○
3.Minimum Controls	○	○	○	○	○	○	○	○
4.Eligibility	○	○	○	○	○	○	○	○
5.Credit Calculation and Verification	○	○	○	○	○	○	○	○
6.Safeguards	○	○	○	○	○	○	○	○
7.Certification and Enforceability	○	○	○	○	○	○	○	○
8.Accountability and Tracking	○	○	○	○	○	○	○	○
9.Nutrient Impaired Segments	○	○	○	○	○	○	○	○
10.Credit Banking	○	○	○	○	○	○	○	○
11. Growth	×	○	×	○	×	○	×	○

  

○	Necessary measures not in place
●	Partial (e.g., Legislation drafted or steps have been taken to implement but not fully in place, some details still to be determined but framework is largely established)
●	Jurisdiction has measures in place and in effect
●	Jurisdiction is evaluating the issue but has taken no formal measures to implement anything specifically
×	Not Applicable

## **II. Summary of Review Observations**

On the basis of interviews and review of statutes, regulations, policies and program documents related to the jurisdictions' trading and offset programs, EPA has drafted the following observations. Tier 1 are classified as statutory or regulatory conformance that EPA expects to be addressed by the jurisdiction in order to maintain consistency with the policies, definitions and elements described in Section 10 and Appendix S of the Chesapeake Bay TMDL. Tier 2 are classified as program recommendations that EPA finds should be addressed in order to strengthen the jurisdictions' trading and offset programs.

### **A. Programs Recommendations Common to All Jurisdictions**

1. Jurisdictions' definitions of trading ratios, offsets, credit, trading, etc. should be consistent with federal definitions. Some jurisdictions use the terms "trading" and "offsetting" interchangeably. See Section IV.1.
2. Interstate and intrabasin trades and offsets should be evaluated by the jurisdictions for potential inclusion in their trading and offset programs. See Section IV.10.
3. Local governments' data and information should continue to be integrated into state tracking and accounting systems. See Section IV.8.
4. Stormwater offsets programs are being evaluated and developed in many jurisdictions. These programs should be consistent with the Chesapeake Bay TMDL and EPA regulations, policy, and guidance. See Section IV.1.
5. Several jurisdictions are considering developing or expanding their current programs. The jurisdictions should continue to develop guidance and methodologies to address meeting baseline for point and nonpoint source sectors including consideration of the use of non-traditional Best Management Practices (BMPs) such as algal scrubbers, oyster aquaculture, etc. EPA suggests that the jurisdictions consider incorporating the retirement of credits and use of net improvement offsets in this guidance and methodology. See Sections IV.2 and 5.
6. Jurisdictions expressed interest in finding a good way to use stormwater BMPs to offset nonpoint sources such as new septic and nonregulated agriculture. The jurisdictions should continue to explore the potential use of that type of offset. See Section IV.2 and 5.
7. Updating enforcement policies and procedures should continue and include, but not be limited to, items such as inspectors' access to off-site areas where credits or offsets are generated and compliance determination methodology. See Section IV.7.
8. Jurisdictions should continue to develop tracking and accounting systems for new or increased loads and offsets for those loads. These systems should be transparent and accessible to the public. See Section IV. 8.

9. Jurisdictions should ensure that adequate resources are available to fully implement the developing trading and offset programs. See Section V.

## **B. New York Specific Observations**

### ***Tier 1 – Statutory or Regulatory conformance***

1. Appendix S of the Chesapeake Bay TMDL expects pollutant loads from new or increased discharges to be offset in the event that the jurisdiction did not set aside allocations for new growth. New York's final Phase I WIP did not include an allocation for new growth. How will New York accommodate new growth for both point and nonpoint sources? See Section IV.1.

2. Septic systems are managed by the NY Health Department. NYDEC manages the Chesapeake Bay TMDL. How will these programs integrate? See Section II.A. 8.

### ***Tier 2 – Program recommendations***

1. The bubble permit that NYSDEC plans to use for all 28 significant wastewater treatment plants (WWTPs) needs to be developed. This bubble permit will allow trades and offsets between these facilities. EPA suggests that New York develop a framework for this permit using Appendix S of the Chesapeake Bay TMDL as a guide for the trading and offset provisions. See Section IV.1.

## **III. History and Overview of New York's Trading and Offset Programs**

New York indicates that it is not sure it needs to develop an offset and trading program for implementation of the Chesapeake Bay TMDL; however it has the capability of using point source to point source trading under existing more general authority.

## **IV. Detailed Evaluation of New York's Trading and Offset Programs Conformance with the 2010 Chesapeake Bay TMDL**

### **1. Authority**

*Necessary measures are partially in place for trading, but not offsets, for point source users. No measures are in place for nonpoint source users. See Section II.B.1 and Sections II.A.1 and 4.*

New York has authority to arrange trades prior to permit issuance under existing more general authority (e.g., Lake Champlain and Long Island Sound (LIS)) and its bubble permit in effect in LIS.

## **2. Baseline (for credit generators)**

*Necessary measures are not in place. See Section II.B. and Section II.A.5 and 6.*

New York has stated that it has the capability of using point source to point source trading. New York has indicated that it is not sure it needs to develop an offset and trading program for implementation of the Chesapeake Bay TMDL.

## **3. Minimum Controls Required for Credit Purchasers**

*Necessary measures are not in place. See Section II.B.1.*

New York has discussed the possibility of using offsets based on sewerage hamlets that are currently served by septic systems (some have already occurred since 2002). This approach would provide for nitrogen reduction and may be able to account for growth, but phosphorus loads from septic systems are not accounted for by the suite of Chesapeake Bay models, so there would be a net increase of phosphorus when the septic loads were converted to POTW loads. In addition, MS4 boundaries have been expanded to town boundaries to include areas not included under the federal definition.

## **4 . Eligibility**

*Necessary measures are not in place. See Section II.B.1.*

Those who may be eligible to trade and/or offset loads pursuant to a potential future offset or trading program in New York include:

- POTWs participating in a bubble permit;
- MS4 jurisdictions; and
- Hamlets undergoing conversion from septic to sewer.

New York considers bubble permits to be an option for POTWs using point source to point source trading. New York intends to include MS4 stormwater boundary expansions in its final Phase II WIP. Under the New York NPDES program MS4 stormwater discharges to impaired waters require offsets. In addition, New York expects that sewerage of additional hamlets currently served by septic systems will occur by 2017.

## **5. Credit Calculation and Verification**

*Necessary measures are not in place. See Section II.B.1 and Section II.A.5 and 6.*

New York does not have official policies related to calculation and/or verification of credits for trades and/or offsets. A bubble permit simply adds up all discharges and if the total allocation is met, all permits are in compliance.

## **6. Safeguards**

*Necessary measures are not in place. See Section II.B.1.*

New York does not have any official policy related to safeguards of credits for trades and/or offsets.

## **7. Certification and Enforceability**

*Necessary measures are not in place. See Section II.B.1 and Section II.A.7 and 8.*

New York does not have any provisions regarding certification and enforceability of trading and/or offset provisions. The NYSDEC Water Integrated Compliance Strategy System has established criteria for identifying and responding to priority violations against New York's water resources.

## **8. Accountability and Tracking**

*Necessary measures are not in place. See Section II.B.1 and Section II.A.3 and 8.*

New York has no formal tracking system related to offsets or trading, other than existing permit compliance systems into which the offsets or "trading" will be incorporated.

## **9. Nutrient Impaired Segments**

*Necessary measures are not in place. See Section II.B.1.*

New York has no formal policies related to offsets or trading in a nutrient impaired watershed.

## **10. Credit Banking**

*Necessary measures are not in place. See Section II.B.1 and section II.A.2.*

New York is considering using wetland mitigation banking for nutrient reduction; nearly 1,000 new wetland acres have been added in New York since 2005.

## **11. Growth**

*Necessary measures are not in place. See Section II.B.1.*

New York intends to manage nonpoint source growth to ensure consistency with the Chesapeake Bay TMDL by applying current state regulations. EPA is not sure that New York's current regulations are adequate enough to manage nonpoint source growth.

## **V. Additional Information and Programmatic Needs**

New York is in the process of planning for stream nutrient criteria development, which will affect any potential offsets or trading related to the Chesapeake Bay TMDL.

## **VI. New York References**

CO2 Emissions Offset Projects - NYS Department of Environmental Conservation, available at: <http://www.dec.ny.gov/energy/53449.html> (accessed 10-18-2011).

Regional Greenhouse Gas Initiative - (RGGI) Carbon Dioxide Budget Trading Program - NYS Department of Environmental Conservation, available at: <http://www.dec.ny.gov/energy/rggi.html> (accessed 10-18-2011)

## APPENDIX A

- 1. EPA expects New York to develop a plan of action to address all unresolved, jurisdiction-specific Tier 1 and Tier 2 recommendations from EPA's final offsets and trading program assessment by the end of 2012. These recommendations are as follows:**

### Tier 1

1. If offset programs are not put in place to manage new sector growth, EPA expects a quantitative demonstration from those jurisdictions as to why those sectors either are not growing or do not contribute new loads even though they are growing. This demonstration should be based on recent historical trends and be consistent with the suite of Bay models and their underlying assumptions. EPA expects the demonstration to address septics, agriculture and development.
2. Septic systems are managed by the NY Health Department. NYDEC, who manages the New York's implementation of the Chesapeake Bay TMDL, is concerned about tracking additional phosphorus loading. EPA expects to discuss with New York how these agencies and respective programs integrate to be included in New York's final Phase II WIP.

### Tier 2

1. The bubble permit that NYSDEC plans to use for all 28 significant WWTPs needs to be developed. This bubble permit is expected to allow trades and/or offsets among these facilities. EPA expects New York to develop a framework for this permit using Appendix S for the trading and offset provisions. A description of this permit is contained in New York's draft Phase II WIP.

- 2. EPA expects New York to address all unresolved recommendations common to all jurisdictions from EPA's final offsets and trading program assessment by the end of 2013. These recommendations are as follows:**

1. Jurisdictions' definitions of trading ratios, offsets, credit, trading, etc. should be consistent with federal definitions. Some jurisdictions use the terms "trading" and "offsetting" interchangeably. See Section IV. 1.

EPA encourages the Chesapeake Bay watershed jurisdictions to provide clear and comprehensive definitions for the terms and concepts incorporated in their nutrient credit offset and trading programs. EPA notes that common terminology may be necessary or appropriate should methods or policies be developed for interstate offsets or trading. EPA expects that NY will continue to

work with and support the WQGIT Trading and Offset Workgroup as trading and offset programs continue to advance in the watershed.

2. Interstate and intrabasin trades and offsets should be evaluated by the jurisdictions for potential inclusion in their trading and offset programs. See Section IV. 10.

In Section 10 of the Chesapeake Bay TMDL, EPA identified interstate trading as a potential stage in the expansion of the trading concept. EPA will continue to work with the Chesapeake Bay jurisdictions to support efficient and appropriate means of expanding nutrient credit trading to meet the goals of the TMDL. EPA expects that NY will continue to work with and support the WQGIT Trading and Offset Workgroup as trading and offset programs continue to advance in the watershed.

3. Local governments' data and information should continue to be integrated into state tracking and accounting systems. See Section IV.8.

Conversion of land uses as the result of development and the redevelopment of land are two examples of important types of information that should be tracked and integrated into the state tracking and accounting systems. EPA expects that NY will continue to work with and support the WQGIT Trading and Offset Workgroup as trading and offset programs continue to advance in the watershed.

4. Stormwater offsets programs are being evaluated and developed in many jurisdictions. These programs should be consistent with the Chesapeake Bay TMDL and EPA regulations, policy, and guidance. See Section IV.1.



EPA looks forward to working with NY in reviewing the baseline loading reduction expectations for existing sources to achieve TMDL targets as identified in their draft Phase II WIP. EPA expects that NY will continue to work with and support the WQGIT Trading and Offset Workgroup as trading and offset programs continue to advance in the watershed.

5. Several jurisdictions are considering developing or expanding their current programs. The jurisdictions should continue to develop guidance and methodologies to address meeting baseline for point and nonpoint source sectors including consideration of the use of non-traditional Best Management Practices (BMPs) such as algal scrubbers, oyster aquaculture, etc. EPA suggests that the jurisdictions consider incorporating the retirement of credits and use of net improvement offsets in this guidance and methodology. See Section IV. 2 and 5.

EPA expects that any expansion and or development of trading and offset programs, including guidance and methodologies, will be consistent with the Chesapeake Bay TMDL, the Clean Water Act, and relevant regulations, policy, and guidance. The use of non-traditional technologies for meeting baseline for point and nonpoint source sectors needs to be consistent with the Bay model and its assumptions. The Chesapeake Bay Program does have an established process for the validation of non-traditional BMPs and inclusion of those BMPs in the Chesapeake Bay Watershed Model. EPA expects that NY will continue to work with and support the WQGIT Trading and Offset Workgroup as trading and offset programs continue to advance in the watershed.

6. Jurisdictions expressed interest in finding a good way to use stormwater BMPs to offset nonpoint sources such as new septic systems and nonregulated agriculture. The jurisdictions should continue to explore the potential use of that type of offset. See Section IV.2 and 5.

EPA expects NY to develop and implement a credible offset program that addresses new and increased loads, including loads from septic systems and other on-site systems. EPA expects that NY will continue to work with and support the WQGIT Trading and Offset Workgroup as trading and offset programs continue to advance in the watershed.

7. Updating enforcement policies and procedures should continue and include, but not be limited to, items such as inspectors' access to off-site areas where credits or offsets are generated and compliance determination methodology. See Section IV.7.

EPA expects that the jurisdiction develops and implements a Trading and/or Offset Compliance Monitoring Strategy and the policies/guidance necessary to implement the strategy. The strategy should provide for regular on site verification by the jurisdiction of generator requirements and conditions to ensure that credits generated are credible.

8. Jurisdictions should continue to develop tracking and accounting systems for new or increased loads and offsets for those loads. These systems should be transparent and accessible to the public. See Section IV. 8.

EPA expects the jurisdictions to develop and implement a tracking and accounting system for new or increased loads and offsets of those loads to ensure that progress is maintained in achieving Bay goals. Tracking of offsets is expected regardless of whether the jurisdiction has a well-developed offset and /or trading program or is conducting offsets or trades on a case-by-case basis while it determines whether to develop a formal program.

9. Jurisdictions should ensure that adequate resources are available to fully implement the developing trading and offset programs. See Section V.

EPA expects the jurisdictions to provide additional resources, as needed, to fully implement their developing trading and offset programs. EPA expects the jurisdictions to provide adequate resources regardless of whether the jurisdiction has a well-developed offset and/or trading program or is conducting offsets or trades on a case-by-case basis while it determines whether to develop a formal program.

