

# Net Improvement Offsets for New or Increased Loads

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EPA Technical Memorandum

U.S. EPA Region 3 Water Protection Division

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## ABBREVIATIONS AND ACRONYMNS

EPA ..... United States Environmental Protection Agency  
NPDES..... National Pollutant Discharge Elimination System  
TMDL..... Total Maximum Daily Load  
NEIEN ..... National Environmental Information Exchange Network

## SCOPE

This technical memorandum presents information the Chesapeake Bay jurisdictions<sup>1</sup> may find helpful or want to consider when deciding whether to include “net improvement offsets” as part of any program to offset new or increased loads. This technical memorandum can be used as a guide by the Chesapeake Bay jurisdictions but it is not a rule or regulation, is not official agency guidance, and does not establish any binding legal requirements. Its purpose is to elaborate on EPA’s expectations, set out in Appendix S and Section 10 of the 2010 Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus and Sediment (Bay TMDL)<sup>2</sup>, regarding the Chesapeake Bay jurisdictions’ offset and/or trading programs. This technical memorandum does not recommend or establish any expectation that Chesapeake Bay jurisdictions include net improvement concepts in their offset programs, but it does provide technical information they may want to consider if doing so, elaborating on the information provided in Section 10 of the Bay TMDL. This technical memorandum is applicable only in the Chesapeake Bay watershed and may be revised in the future.

## INTRODUCTION

The Bay TMDL assumes that the Chesapeake Bay jurisdictions will offset all new or increased loads that are not specifically accounted for in the TMDL’s wasteload allocations (WLAs) and load allocations (LAs). (Bay TMDL at Section 10.1). EPA also assumes that any Bay-related offset and trading programs will be consistent with the Clean Water Act<sup>3</sup>, its implementing regulations, EPA’s 2003 Water Quality Trading Policy,<sup>4</sup> EPA’s 2007 Water Quality Trading Toolkit for NPDES Permit Writers<sup>5</sup>, and the Bay TMDL.

Net improvement in the context of this technical memorandum is defined as an offset at a ratio greater than merely accounting for the entire new or increased load. For example, a net improvement offset of 20 percent would be expressed as a 1:1.2 ratio, meaning each one (1) pound of new or increased load is offset with one (1) pound of reductions or credits and the additional 0.2 (20 percent), which is retired, reflects “net improvement” in loading reductions and in resulting water quality.

The concept of “net improvement” is similar to that of a “retirement ratio”, the difference being that retirement ratios typically apply to all trading- and offset-related credits, not just offset credits. Other ratios also may be applied, such as uncertainty ratios or ratios to

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<sup>3</sup> Clean Water Act, 33 U.S.C. §§ 1251 et seq.

<sup>4</sup> United States Environmental Protection Agency, Water Quality Trading Policy (2003), available at <http://www.epa.gov/owow/watershed/trading/finalpolicy2003.pdf>. Last accessed 11/30/2013.

<sup>5</sup> United States Environmental Protection Agency, “Water Quality Trading Toolkit for Permit Writers,” Updated June 2009. Available online at <http://water.epa.gov/type/watersheds/trading/WQTToolkit.cfm>

generate additional credits to insure against failed BMPs or other issues. This technical memorandum concerns only the ratio associated with net improvement offsets.

## NET IMPROVEMENT AS A CHESAPEAKE BAY JURISDICTION TOOL

Chesapeake Bay jurisdictions that do not already use net improvement offsets in their offset programs may want to consider for themselves if net improvement offsets could be a potentially useful tool. Since the “net improvement” portion of a net improvement credit (i.e., the additional 20 percent in the above example) is retired, the additional 20 percent reduction could count towards meeting the jurisdiction’s Bay TMDL load reduction targets, thus accelerating or better assuring overall pollutant reduction progress.

If a Chesapeake Bay jurisdiction decides for itself to use net improvement offsets as a tool, such offsets could apply to new or increased point-source loads or new or increased nonpoint source loads at the discretion of the Chesapeake Bay jurisdiction. EPA has the same expectations and assumptions for net improvement offset credits as it does for all offset and trading credits for the Bay jurisdictions as described in the Bay TMDL and technical memoranda. For example, as with all credits, net improvement credits must be unique and may not be double-counted.

For purposes of annual progress reviews and two-year milestones, Bay jurisdictions may count net improvement offset credits towards their portion of the Bay TMDL’s loading reduction targets. EPA expects that Bay jurisdictions will tell EPA which source sectors are receiving the benefit of the net improvement credits. This will ensure that both the Chesapeake Bay jurisdiction and EPA know and understand how net improvement credits will impact overall progress for the various source sectors, and how they might impact data reporting and modeling activities.

## SUMMARY OF EXPECTATIONS

This technical memorandum does not set an expectation that Chesapeake Bay jurisdictions include net improvement offsets in their trading and offset programs. If a Chesapeake Bay jurisdiction decides for itself to use net improvement offsets, EPA has the same expectations and assumptions for net improvement offset credits as it does for all offset and trading credits for the Bay jurisdictions. EPA also expects that Chesapeake Bay jurisdictions will tell EPA which source sectors are receiving the benefit