DEQ developed and made available to the public a draft version of Montana's Policy for Nutrient Trading on August 2, 2010. On April 13 and 14, 2011, DEQ solicited public comment on the draft policy at a Nutrient Trading Workshop, which was held for the purpose of sharing information on nutrient trading. DEQ received three sets of comments in the summer of 2011 from:

- 1. AE2S and CH2MHILL Engineering firms.
- 2. United States Environmental Protection Agency.
- 3. Montana League of Cities and Towns.

Below is our response to the comments on the draft policy on October 28, 2011

## AE<sub>2</sub>S and CH<sub>2</sub>M Hill Comments

**COMMENT 1:** The trading policy should allow other nutrients in "what may be traded" (page 6, Paragraph 4), such as DO, BOD, etc.

**RESPONSE:** DEQ intends to limit the scope of this trading policy to nutrients in the form of total nitrogen and total phosphorous in order to maintain simplicity at the outset. If trading these nutrients under the draft policy is successful, the trading policy could be expanded to include other parameters in the future.

**COMMENT 2:** We disagree with the definition of "baseline." When there is a TMDL, the baseline for nonpoint sources should be the load allocation as described in the TMDL.

**RESPONSE:** The draft trading policy defines baseline in a manner that allows a nonpoint source to generate credits as soon as it begins to reduce its nutrient load without first meeting the load allocation assigned to the nonpoint source. One of the reasons for allowing a nonpoint source to generate credits as soon as it begins to reduce its nutrient load is that the load allocation in a TMDL is typically aggregated for all similar nonpoint sources throughout an entire watershed. Defining "baseline" so that all nonpoint source contributors need to achieve (collectively) the watershed load allocation before a credit may be generated would eliminate the majority of trading opportunities and greatly reduce the effectiveness of this policy. As the policy is currently written, a nonpoint source within the aggregate may generate credits by reducing a portion of the overall load allocation, but does not need to reduce the entire load allocation attributed to the aggregate.

A second - and perhaps the primary reason - for allowing nonpoint sources to generate credits without first meeting the overall load allocation is that there is no requirement under federal or state law that requires nonpoint sources to comply with a TMDL. For this reason, DEQ believes that any reduction of nutrients attributed to a nonpoint source qualifies as a credit and may be purchased by a point source to meet its waste load allocation. *See also*, Response to EPA's Comment.

**COMMENT 3:** The policy needs to define "banking" since it currently precludes it. Credits should be applied in the same reconciliation period as they are generated. When that defined reconciliation period expires, credits may be generated for the next reconciliation period as long as the best management practice (BMP) continues to reduce nutrients.

**RESPONSE:** DEQ does not believe that the term "banking" needs to be defined since the term is self-explanatory. Moreover, the draft policy no longer precludes banking of all credits. In response to this and similar comments, language has been added to the definition of "credit" to allow the banking of credits for an "off season reduction" in nutrients, if it can be shown that the reduction will provide a benefit to water quality within the season that the numeric nutrient standards apply.

**COMMENT 4:** DEQ should develop an approved list of BMPs for earning credits and include it in the trading policy.

**RESPONSE:** DEQ intends that the trading policy allow as many viable options for trading as possible. That is why the agency does not agree that only a DEQ-approved list of BMPs may be considered for trading purposes. DEQ will consider any BMP or nutrient reduction activity that has been approved by other federal and state entities and that is included in an application for a trade, as specified in the trading policy. Examples of BMPs and septic trading methods used by other states to generate credits will be added to this policy as "Appendix A" to provide an example of BMP credits approved by other states.

**COMMENT 5:** DEQ should develop an approved table of credit calculations, subject to key inputs from the technical team that developed the table, as part of the trading policy.

**RESPONSE:** Similar to the previous response, the experiences derived from other federal and state agencies will be the starting point for approving credits. Although the trading policy will not include an "approved" table of credit calculations, DEQ will consider any credit calculation that has been approved or used by another federal or state agency, if it is proposed in an application for a trade, as specified in the trading policy.

**COMMENT 6:** Delivery factors and trading ratios should be modified in the draft policy to adopt a more common method to derive them. Specific delivery factors and trading ratios can be developed in the future.

**RESPONSE:** The draft trading policy does not specify a particular method for deriving trading ratios, but simply explains what these ratios are and how they are typically applied in the calculation of a credit. DEQ intends to rely on the experiences derived from other federal and state agencies when applying trading ratios.

**COMMENT 7:** DEQ should consider defining delivery ratios differently in the trading policy regarding delivery over land as opposed to water.

**RESPONSE:** We disagree that there needs to be two definitions of "delivery ratio" to account for different delivery ratios over land or in water. The draft trading policy currently includes

language that acknowledges DEQ's ability to develop different delivery ratios "for a pollutant's travel over land or in water (or both)." As indicated in response to Comment 6, the definition of "delivery ratio" is not intended to establish a specific ratio for land as opposed to water, but rather describes what the ratio is and how it is used in the calculation of a credit.

**COMMENT 8:** The baseline definitions may be too vague. Specifically, any nonpoint source that meets the baseline described in the definition may trade. We suggest that DEQ add qualifiers regarding which nonpoint sources may trade.

**RESPONSE:** The DEQ does not believe it is necessary or desirable to limit the eligibility of any nonpoint source that is willing to earn nutrient reduction credits for purposes of trading. That is why the draft policy allows nonpoint sources to begin generating credits without requiring the load allocation in a TMDL to be met before generating credits.

**COMMENT 9:** Make sure the use of the term "trade" versus "trades" versus "trading program" are used correctly, i.e, do some parts of the policy apply to a specific trade and what parts of the policy apply to every trade?

**RESPONSE:** DEQ could not find specific examples of where these terms were used in a manner that was not intended. If a more specific comment is received during formal or informal comment on the draft policy showing where the policy should be corrected, then DEQ will consider making the appropriate adjustments to the draft policy.

**COMMENT 10:** There should be some time for the point source to correct a problem and avoid a permit violation, if a nonpoint source defaults on providing credits.

**RESPONSE:** Any violation of the permit resulting from a failure of a nonpoint source to generate the appropriate amount of credits would be handled the same as any other permit violation. If a violation occurs as a result of any default by the nonpoint source, DEQ would likely work with the permittee to establish a compliance schedule and corrective actions that would address the violation. The violation itself, however, would remain.

**COMMENT 11:** The State should conduct inspections and audits to ensure the credits are being produced.

**RESPONSE:** The permit will include language requiring the applicant to verify the efficacy and reliability of credits being used. The permittee's initial verification will likely be extended throughout the 5-year permit cycle by a condition of the permit that would require an annual report on the amount of credits actually generated during the previous year. The DEQ, however, will reserve the right to audit and inspect sites to ensure that statements made in the reports are accurate.

**COMMENT 12:** In the section of the trading policy establishing the duration of credits, DEQ should eliminate the statement that "other safeguards" may be required by the DEQ when submitting a trading proposal. Also, the requirement for other safeguards does not belong in the "duration of credits" section.

**RESPONSE:** DEQ has modified the section to eliminate language indicating that DEQ may require "other safeguards" to ensure that a permittee has enough credits to last a 5-year permit cycle. We left in language, however, that cautions the permittee and the entity generating the credits to consider other safeguards to ensure that the appropriate amount of credits are generated during the 5-year term of the permit.

**COMMENT 13:** In the "Fundamentals" section of the draft policy, there is a list of activities that are labeled "Examples of Nutrient Reduction Credits." This list is not an example of a credit, but rather examples of ways you may generate credits. The commentor suggests that the trading policy should have examples of specific credits you would receive for certain best management practices.

**RESPONSE:** In response to this comment, the DEQ has changed the heading of the list of activities to read "Potential Sources of Nutrient Reduction Credits." DEQ declines, however, to include in the policy a list of pre-approved credits that will automatically be given for a particular best management practice. Instead, DEQ has included examples of pollution reduction credits given by other states for septic removal and other best management practices, which will be included in Appendix A to the policy. DEQ will consider these methods of obtaining credits when approving a particular trade.

**COMMENT 14:** The section of the draft policy explaining the boundaries of the trade needs to be more precise. At a minimum, trading should be limited to the area of the TMDL. In some cases, it may need to be smaller to protect local conditions. Where no TMDL exists, then a set of criteria needs to be developed for all trades.

**RESPONSE:** The language in the draft policy provides DEQ the latitude necessary for a caseby-case evaluation of a proposed trade within a watershed. This case-by-case approach was selected rather than rigid rules or criteria that would limit the area of a trade without a scientific basis for doing so. As written, the draft policy contains language in the Introduction section indicating that DEQ will not allow a trade or the use of credits that would cause an impairment of existing or designated uses. That language allows DEQ to limit an area of a trade when justified by local conditions.

**COMMENT 15:** Not giving credit for BMPs already in place prior to the effective date of the policy needs more thought. Maybe this requirement should only apply when a TMDL has been developed...in order to be consistent with the assumptions in the TMDL.

**RESPONSE:** In response to this comment, the draft policy has been modified to remove the language that would prohibit the use of credits derived from a BMP in place before the effective date of the policy. Given the fact that DEQ has taken the position that it will allow appropriate trades prior to the adoption of rules incorporating the trading policy, the language contradicting DEQ's position has been removed from the draft policy. Instead, credits for a BMP that is in place prior to DEQ's approval of a trade will be evaluated on a case-by-case basis, and may be approved as long as the use of such credits is consistent with the assumptions in the TMDL.

## **EPA's Comment**

**COMMENT 1:** It is EPA's understanding that the draft policy defines baseline in a manner that allows nonpoint sources to generate credits as soon as they begin to reduce their nutrient load. These credits would then be available for purchase by point sources assigned a waste load allocation. Because the reductions achieved by the nonpoint source would be counted twice (i.e., as an actual reduction towards meeting a load allocation and as a credited reduction towards meeting a waste load allocation), the net result of this transaction is to allow discharges from point and nonpoint sources that exceed the loading capacity identified in the TMDL. Since any exceedance of the loading capacity of a TMDL results in a violation of water quality standards, EPA believes that allowing a permittee to use credits generated by a nonpoint source prior to meeting the load allocation in a TMDL is contrary to its rules that prohibit the issuance of an NPDES permit that violates state water quality standards.

**RESPONSE:** DEQ does not agree that allowing nonpoint sources to generate credits as soon as they begin to reduce their nutrient load will result in a violation of EPA's rules governing the issuance of NPDES permits. DEQ currently issues permits that require a point source to meet the WLA in a TMDL without also requiring all nonpoint sources to meet the load allocation assigned to them in the TMDL. So far, EPA has not objected to any of these permits as violating its rules prohibiting the issuance of a permit that will exceed state water quality standards. It defies logic that EPA would find that the issuance of a permit that relies on a nonpoint source's actual reduction toward meeting a load allocation would have a worse environmental effect than no reduction of a load allocation at all.

Since there is no mechanism in law that requires nonpoint sources to even begin to reduce their load allocation, the draft trading policy allows nonpoint sources to generate saleable credits as soon as they begin the process. DEQ believes that allowing the voluntary reduction of nutrients by nonpoint sources is consistent with the Clean Water Act and required by Montana's TMDL statutes.

## League of Cities and Towns' Comments

**COMMENT 1:** Page 2, Number 1. The most significant comment on the policy is the statement on this page stating that the goal of trading is to "provide an alternative for achieving compliance with Montana's base numeric nutrient standards that will preclude the need for obtaining temporary water quality standards". We would like the goal of trading to be to encourage point and non-point sources to work cooperatively in the watershed to reduce nutrient loading. We think temporary nutrient standards will be required in most Montana watersheds and the goal of the policy should be to help Montana Cities meet their permit requirements regardless of how those are generated, rather than only to meet the numeric criteria. A longer term goal could be using them to meet the numeric criteria.

**RESPONSE:** DEQ understands that, in the short term, many permittees will need a variance from the base numeric nutrient standards in order to comply with their permit limits. Therefore,

language has been added to the Introduction and to the Purpose section that allows trading to meet not only the base numeric nutrient criteria, but a variance from those criteria as well.

**COMMENT 2:** Page 3, Number 1.b. This paragraph indicates "...in impaired waters prior to a TMDL being established, the baseline for point sources should be established by the applicable water quality based effluent limitation, a quantified performance requirement, or a practice derived from the nutrient water quality standard." Please provide an example of the quantified performance requirement or a practice derived from a water quality standard. It's not clear what MDEQ is asking for in this situation.

**RESPONSE:** The phrase has been deleted. The base numeric standards define the baseline for point sources.

**COMMENT 3:** Page 3, Number 2(a). The policy indicates that: "A point source may generate credits by achieving measured nutrient reductions greater than the wasteload allocation established for the point source under a TMDL or greater than a water quality based effluent limitation for its discharge derived from the State's numeric nutrient criteria." This sentence again implies that load trading could only take place where limits are derived from the numeric criteria. Given how low those criteria are, we think the statement should be modified to indicate limits that are generated as temporary criteria.

**RESPONSE:** In response to this and other comments, the policy has been amended to allow trading to meet a variance. However, a permittee that achieves nutrient reductions greater than necessary to meet a variance cannot use the excess reductions obtained after meeting the variance for trading purposes.

**COMMENT 4:** Clarification is needed to the definitions in Section II that establish the conditions for point source trading and also establish under what conditions trades are allowed to meet TMDLs and water quality requirements.

**RESPONSE**: The intent of Section II. Definitions, is to define and establish a baseline above which a point source or nonpoint source may earn credits that can then be sold to others. The baseline is defined differently for point sources in waters that have an approved TMDL versus no TMDL. For waters with an approved TMDL, the waste load allocation establishes the point source's baseline. For waters with no TMDL, a water quality-based effluent limit in a permit, which is based upon achieving the base numeric nutrient criteria, establishes the point source's baseline. DEQ does not believe that any further clarification is needed.

**COMMENT 5:** Section II, Definition 1, addresses when a seller may generate credits for trading by defining : "The baseline for generating pollution reduction credits." It is not clear when a point source discharger is eligible to be a Buyer and trade in order to use credits to meet nutrient control requirements. Can a discharger meet all nutrient regulatory requirements by trading?

**RESPONSE:** The Introduction and Purpose sections of the trading policy have been changed to clarify that any permitted source that needs to meet a regulatory requirement, such as a variance,

may do so through trading. In order to generate credits to sell, however, the seller needs to meet the applicable baseline in order to generate saleable credits.

**COMMENT 6:** In Section II, Definition 1, Baseline requires "...pollutant reductions greater than those required by a regulatory requirement..." We need to clarify and verify that a buyer can use credits to meet regulatory requirements: i.e. "Where appropriate, the buyer can use the credits to meet a regulatory obligation."

**RESPONSE:** See response to Comment 5 above.

**COMMENT 7:** It appears that nonpoint sources are treated differently from point sources in the policy and can generate credits merely by reducing from existing land uses: "...the baseline for nonpoint sources is the level of pollutant load associated with existing land uses and management practices that comply with applicable state, local, or tribal regulations." There's an inequity in the lenient nonpoint source entry point to generate credits, whereas there's a much higher bar required for point sources. It seems like a more equitable approach should be proposed.

**RESPONSE:** The different treatment is inherent in the structure of the CWA. That is, point sources are regulated and nonpoint sources are not. The "lenient" approach for nonpoint sources benefits point source buyers in trades by lowering costs.

**COMMENT 8:** In Section II, Definition 2, it states that: "Credits cannot be banked for a future time period." This condition may be too restrictive to take off the table in a single sentence. We have found in other locations that off-season nutrient reductions may have lasting benefit to water quality through the summer nutrient control season. Perhaps this restriction could be conditioned such that a technical basis could be provided to support a reduction made in the off-season that benefits; i.e. "Credits cannot be banked for a future time period unless off-season reduction can be shown to provide summer season water quality benefits."

**RESPONSE:** We agree. Language has been added at the end of the definition of "credit" to clarify that banking credits may be allowed in certain circumstances.

**COMMENT 9:** Page 5, Number 8(b), The last sentence indicates: "Trades involving nonpoint sources will use uncertainty ratios of greater than 1:1." The League would like to make the case that there is nothing uncertain about a septic tank connection and that septic tank connections should be granted a 1:1 uncertainty ratio.

**RESPONSE:** The language specifying a 1:1 uncertainty ration for nonpoint source trades has been deleted. Language has been added to clarify that in some instances an uncertainty ratio is not needed due to the use of a delivery ratio.

**COMMENT 10:** Page 5, Number 8(c), The retirement ratio seems like an added safety factor without technical merit. The uncertainty ratio is intended to reflect the unknowns. This seems like a redundant ratio that would discourage trading.

**RESPONSE:** The trading policy has been amended to eliminate the use of a retirement ratio. DEQ will use the uncertainty ratio when warranted to account for a net water quality benefit.

**COMMENT 11:** Page 6, Section III, 2. This paragraph says "All nutrient trades must comply with the TMDL waste load allocations and must not exceed the total load imposed by the TMDL." The League would like some clarification. Many nutrient TMDLs will include phases. We suggest that the paragraph be modified to allow for phased implementation.

**RESPONSE:** The DEQ does not intend to develop phased TMDLs in the future. The policy has been amended, however, to clarify that a trade may be used to meet an interim or phased waste load allocation.

**COMMENT 12:** Page 6, Section III, 3. This paragraph indicates "In the event of default by another source generating credits for a MDES permittee, the MPDES permittee using those credits is responsible for complying with the effluent limitation that would have applied if no trade had occurred." The MPDES permittee would need some time to respond if this occurred. It would be unreasonable for them to be out of compliance immediately in the event of a trade default. The permittee should be given a reasonable time period to address the situation.

**RESPONSE:** The credits obtained by a point source from a trade will be included in the permit as a condition of the permit. Therefore, violations resulting from the failure of a credit generating source would be handled the same as any other permit violation. DEQ typically works with permittees to establish corrective actions when violations occur.

**COMMENT 13:** Page 6, Section III, 5. "Other safeguards, as determined by DEQ, may be required. They may include such things as backup plans and alternative options to address failures by non-point sources to provide the contracted credits." Similar to the comment above, the point source would need to have time to react if a non-point source was unable to meet the permit requirements due to a default by the credit generating source.

**RESPONSE:** Comment noted. See response to Comment 12 above.

**COMMENT 14:** Page 7, Section IV, 3. A more generalized approach to septic tank trading would encourage more MPDES point source permittees to connect septic tanks. Requiring the analysis described here will require an engineering study before a trade could take place. Consider developing a more generic statewide approach, similar to the State of Maryland rather than requiring a site specific analysis.

**RESPONSE:** DEQ does not believe that a generic statewide approach to granting credits for septic hookups is viable at this time. Too many variables exist in the underlying geology and hydrology. For this reason, the DEQ believes that the Maryland method is overly simplified and has limited justification. The DEQ is working on a more simplified method with better justification and that better accounts for site- specific conditions.

**COMMENT 15:** Section V, Implementation. The implementation section does not address timeliness of DEQ review and approval of nutrient trades. This may be critical to the viability of

the trading program in order to have a prompt review of potential trades in order to link with MPDES permitting activities.

**RESPONSE:** DEQ encourages the use of a pre-application process and is willing to meet with the permittee early on to resolve trading scenarios.

**COMMENT 16:** Section V, Implementation. Management and administration of trading programs is not addressed in the policy, other than to designate DEQ as the reviewer. Who will be responsible for tracking and administering trading frameworks within watersheds? This issue must be addressed.

**RESPONSE:** DEQ does not intend to manage the generation of credits used for trading. The individual watershed group may be the best entity for managing watershed credits. DEQ will only track and ensure compliance on an individual permit basis.