Summary of the Water Quality Trading Draft Guidance Stakeholder Process and Response to Comments

EPD has developed a water quality trading guidance document that outlines how water quality trading could be used to address water quality impairments and limits in available assimilative capacity, particularly nutrients. On June 14, 2021, EPD published a draft guidance document and summary of previous stakeholder meetings and announced a series of four stakeholder workshops to go through the draft guidance document section by section. Notice of the stakeholder workshops was posted on EPD's webpage and distributed to individuals and organizations who had indicated an interest in participating in the development of water quality trading guidance.

Each of the four meetings was held virtually to encourage participation from interested parties across the state. The meetings were organized as follows:

1. Thursday, July 22, 2021. This meeting served as the initial kick-off meeting and included a summary of trading-related projects and the 2019 stakeholder process. The meeting also included targeted discussion of sections 1-5 of the draft guidance document. Those sections discuss much of the water quality trading framework.
2. Thursday, August 19, 2021. This meeting focused on the implementation specifics (trading plan development and permit language) related to the framework outlined in sections 1-5 of the draft guidance document. This meeting focused on Appendices B and C of the draft guidance document.
3. Thursday, September 16, 2021. This meeting focused on sections 6-11 of the draft guidance document, which cover credit generation, tracking, and compliance and enforcement.
4. Thursday, October 14, 2021. This was the final stakeholder meeting. This meeting served as a wrap-up, summarizing the stakeholder process and feedback received by EPD. Questions were taken and next steps were discussed.

Comments were accepted at the meeting and through written communication, and interested parties were welcome to meet with EPD individually to discuss questions and concerns. EPD set a comment deadline of November 1, 2021, and EPD received six comment letters. Following the stakeholder process, EPD also held five individual meetings with interested stakeholders. A summary of the comments received and EPD's responses are provided in the table below.

Comment	Response
General comments	
A commenter listed three main points they felt would strengthen the guidance: alternatives to direct water quality monitoring; a cap on watershed load credit deduction; and allowing a "water quality bank" to be responsible for generating credits.	While this comment was provided as a general comment, each of the three main points were raised in other sections will be addressed there. Please see the comments and responses under sections 4 and 5.
A commenter noted appreciation that EPD had repeatedly articulated the need to protect water quality front and center in development of the guidance and to all stakeholders.	Comment noted.
1. Introduction	
A commenter suggested that EPD include flexibility in the document to allow EPD to react to future conditions and situations without reissuing the guidance. The commenter offered the following language: "EPD reserves the right to consider other options based on additional information or site specific circumstances."	The document includes language allowing flexibility in the disclaimer, including a statement that the guidance is non-binding and that EPD can consider other approaches consistent with federal and state statutes and regulations. No change made.
A commentor provided the suggestion that EPD allow for pilot tests, the details of which could be worked out later and be case-specific. Since many of the possibilities for trades are untested or new, this would give flexibility to EPD (and permit holders) to explore options without making a full commitment.	The document includes sufficient flexibility for entities to engage in a pilot project or pilot test. Explicit language referring to pilot projects or pilot tests has not been included, but EPD would be happy to work with interested parties in developing either..
A commenter recommended that EPD use a similar approach to EPA's testing of unproven technologies and approaches in wastewater, citing EPA's Innovative and Alternative Technology Assessment Manual (1980) as a potential resource (https://www.epa.gov/sites/default/files/2019-12/documents/innovative-alternative-tech-manual-1980.pdf).	Thank you for sharing this resource. It clearly illustrates the benefit to sharing information about successful and less successful technologies and approaches. EPD can help make available updates regarding trade implementation on the EPD water quality trading website.
"Water quality trading generally involves the opportunity to earn water quality credits based on pollution reductions beyond those already required by law or regulation." Misleading. Suggesting: "Water quality trading enables facilities to buy and sell pollutant reduction credits for reductions beyond	Change made. The sentence has been reworded as written.

water quality-based effluent limitations (WQBELs), and gives nonpoint sources the opportunity to be compensated for reductions beyond those already required by law or regulation."	
The current text reads, "The trade ultimately transfers an equal or greater water quality benefit to the receiving water, as measured by pollutant load reductions." The commenter suggested: "Trading ultimately provides an equal or greater water quality benefit to the receiving water..."	Change made. The sentence has been reworded as written.
2. Guiding principles for water quality trading	
The current text reads, "Water quality trades must be consistent with the federal Water Pollution Control Act (CWA)…" The commenter noted that although this is technically true, the Clean Water Act (CWA) is clearer terminology.	Added "commonly known as the Clean Water Act" to the text for clarification.
4. Trading framework	
A commenter noted relief that EPD is not considering nonpoint source-to-nonpoint source trading and reiterated their belief that such trading should not be permitted.	Comment noted.
A commenter noted that for point-to-point source trading, they believe it is essential to establish baselines and require real demonstration of water quality improvements in the form of "real reduction in pollutant loading" from whatever measures are taken to generate credits. The commenter expressed that this is clearly stated in the draft guidance.	Comment noted.
"Credits can only be generated by a real reduction in pollutant loading from the baseline conditions (see section 5.4.1 for more information about trading baselines)." A commenter requested that EPD specify in Section 4.1.1 that credits are generated for specific pollutants (e.g. total nitrogen, total phosphorous).	The following change was made to clarify that credits are generated for specific pollutants in Section 4.1.1.b: "Credits are generated for specific pollutants and can only be generated by a real reduction in pollutant loading from the baseline (see section 5.4.1 for more information about trading baselines)."

A commenter expressed concern that nonpoint-to-point trades may not work, may be risky, and may not result in real pollutant reduction. The commenter asked that the guidance require posted bonds from nonpoint source credit generators to mitigate risk.	EPD believes that under the right conditions, point to nonpoint trades can be effective. The guidance document includes monitoring requirements, discussions of EPD's oversight responsibilities, and collection of water quality data. Guidance cannot require a bond, and EPD is not planning to pursue bond requirements for trading.
A commenter noted concern that a point-to-nonpoint trading scheme would have a side effect of permitting wastewater treatment plant operators to delay needed upgrades at their facilities, choosing instead to simply purchase "wiggle room" from another nutrient loading source in lieu of improving treatment technology. The commenter noted that they believe that more effective wastewater treatment of discharges to sensitive waterways such as Lake Lanier is the most prudent way to protect water quality, rather than a complicated and difficult-to-measure point to non-point trading scheme.	EPD is required to issue permits that protect in-stream water quality standards and water quality. Water quality trading is contemplated as one potential option that may result in waterbodies meeting water quality standards and supporting designated uses more efficiently. The water quality trading plan includes requirements for monitoring water quality and documenting credits generated and/or purchased to ensure water quality benefits are realized.
A commenter noted that the guidance succeeds in formalizing a process for a utility to do trades in-house. They believe that the draft guidance makes the process robust enough to give those interested in two-party trades—a NPDES permit holder considering a partner in a NP to P source trade— really think hard about the risks, uncertainty and costs before engaging in WQ trading.	Comment noted.
"Trades between at least one permitted point source and one or more nonpoint sources that are reducing or plan to reduce their nonpoint pollutant loads beyond baseline levels…" This contradicts 2.a, which states that BMPs are first installed and credits generated after, so trading can't occur based only on planned reductions. Suggest removing "or plan to reduce."	This section is intended to convey that the trading plan submitted to EPD for review and approval can include proposed nonpoint source projects that have not yet been implemented. This does not contradict that trading would only occur after the credits are generated. Additional language (in bold) has been included to provide clarification: "Trades between at least one permitted point source and one or more nonpoint sources that are reducing or plan to reduce **prior to initiating trading** their nonpoint pollutant loads beyond baseline levels"

A commenter requested EPD consider allowing the STEP-L model, or models used for TMDL development, for credit estimation and generation. The commenter recommends Georgia consider using this existing information for both credit estimation and credit generation.	The STEP-L model and TMDL model would serve different purposes. The STEP-L model focuses on specific BMPs, while the TMDL model would allow for assessments of changes to land use and/or reallocation of loads. If the proposed nonpoint source projects include changes to land use, then the TMDL model may be an acceptable alternative to the STEP-L model for planning purposes. The TMDL model would not be an acceptable alternative to monitoring: all nonpoint source BMPs would be subject to some monitoring to verify that the estimated load reductions are achieved.
A commenter stated that, "Direct water quality monitoring is best suited for projects with a defined inflow and outflow. Other types of nonpoint projects do not lend themselves to direct water quality monitoring such as riparian buffer enhancement, land conversion, or green infrastructure projects. Currently, Georgia, other states, and the USACE use set pollution reduction rates for credit generation. If direct water quality monitoring is required for projects that have diffuse overland flow or infiltration, these types of projects will not be selected by permitholders for trading. This places an especially high burden on small utilities that have limited resources to develop complex monitoring programs. If Georgia seeks to effectively convert more urban or agricultural land to forest, increase natural stream buffer area, and install infiltration practices - there must be a state-led effort to develop standard pollution reduction rates for these practices."	EPD is emphasizing monitoring over modeling because models tend to over-credit. Without a direct quantitative connection to in-field data, it is hard for EPD to defend that a trading project is resulting in measurable water quality improvements. However, EPD understands that nonpoint source monitoring plans will be informed by the specific nature and configuration of the project. Something with an inflow and outflow (like some stormwater ponds, for example) may receive quarterly monitoring during specific rain events that are then connected to a pollutant load reduction. An infiltration project may have a monitoring plan related to conducting infiltration tests, while a buffer may have upstream/downstream monitoring or edge of field monitoring on a timescale that reflects the low-management requirements of the project.
If the BMP's design nutrient load reduction is only a small fraction of the total load in the waterway being sampled, it may be difficult to use in-situ water quality sampling to demonstrate the discrete load reduction. This may encourage a utility to only consider implementing those BMPs that are easily monitored and leave many valuable, potentially more effective, and readily implementable options off the table. Would EPD consider	As mentioned above, EPD understands that nonpoint source monitoring plans will be informed by the specific nature and configuration of the project. EPD will provide additional technical information and resources to potential trading participants to assist with the development of sound monitoring plans.

alternative methods for recognizing BMP estimated load reductions where sampling techniques may not be well suited for the proposed project?	
Consider additional methods of documenting credit generation rather than direct water quality monitoring, such as using existing models to detail water quality benefits of land-use conversion, or using existing BMP manuals to estimate pollutant reduction, or developing a Georgia-specific literature review for nonpoint source BMPs. Requiring water quality monitoring for every individual BMP project may be cost-prohibitive and discourage trading.	As noted above, EPD is emphasizing monitoring over modeling because models tend to over-credit. Without a direct quantitative connection to in-field data, it is hard for EPD to defend that a trading project is resulting in measurable water quality improvements. EPD will work with permittees interested in water quality trading in the development of effective and feasible monitoring plans. Water quality trading is one option of several to address in-stream water quality issues. If water quality trading is not feasible, other options would still be available.
The commenter appreciates that the draft guidance is clear that nonpoint source generators cannot obtain credits to market until improvements via BMPs are measured and documented in comparison to a "baseline" established through the STEP-L model results.	Comment noted.
The commenter expressed confusion about the meaning of "public funds." Many credit-type projects or BMPs are eligible for funding under the SRF and 319 programs with some restrictions. We suggest that Georgia not place additional restrictions on funding sources. Funding for water, wastewater, and stormwater/non-point source infrastructure is enough of a challenge already. We suggest that the trading guidance focus on performance and be silent to funding.	EPD does not wish to put excessive restrictions on funding sources for nonpoint source improvements. However, the amount of funding allocated to nonpoint source implementation through the 319(h) program is very limited. EPD is electing to use 319(h) funding for direct Statewide Nonpoint Source Management Plan implementation.
A commenter recommended EPD consider adding language to approve an independent nonpoint source project(s), including a third party such as a "water quality" bank, that could also assume responsibility for nonpoint source pollutant reduction. Establishing an independent bank is a common and accepted means to provide wetland, habitat, and water quality credits in other states.	EPD added explicit reference to "water quality banks" in Section 5.1: "A separate "water quality" bank could be developed to generate credits for multiple buyers or serve as an "insurance pool" that serves a regional entity or group of point source permittees."

A commenter requested EPD add a reference to more information on offset projects, such as geographical factors, maintenance, etc. if it differs from that of nonpoint source - point source trading. Here, only monitoring is mentioned.	Language was included to address this comment in Section 4.1: "All relevant requirements for point-nonpoint trades apply here as well, including geographic factors, maintenance, and reporting. Because an offset project is conducted by the permittee, requirements specific to documenting expectations between two or more trading partners would not apply and would not be required for offset projects."
A commenter agrees that there should not be double counting in the trading agreements. However, if a BMP removes multiple parameters, all parameters should be eligible for a trade. This is similar to a unit process in the wastewater treatment train. For example, primary clarifiers remove both TSS and BOD. The plant gets "credit" for both removals. So, for nutrients, if a BMP removes both phosphorus and nitrogen, both should be eligible for trades. The commenter thinks that they heard EPD agree with this approach and were making related edits, but they wanted to provide input on this point.	The language is not intended to prevent someone from generating credits from multiple parameters. However, ecosystem services credits, such as streambank or wetland mitigation, cannot also be sold for water quality trading purposes as well. If a credit is used to mitigate for streambank or wetland impacts, it cannot generate water quality credits on top of that mitigation. This has been clarified in section 4.2.5.
A commenter requested EPD clarify that a regional BMP or "water quality" bank may generate credits, tied to a specific area of land, that can be sold to multiple parties. Section 4.2.5 clearly states a credit cannot be sold twice, which is critical to the integrity of the program, but the same area of land could, presumably, generate more credits than a single buyer may require.	EPD agrees that a regional BMP or "water quality" bank may generate credits. The text "on the same area of land" was removed to reduce confusion.
A commenter agrees that various mechanisms should be allowed to verify project implementation and performance. Just as with the Georgia Stormwater Management Manual, a pollution reduction rate is accepted if a BMP is designed and inspected by a qualified professional. Annual inspection and maintenance will also ensure that BMPs are performing as designed.	Comment noted.
A commenter suggested "pollutant reduction project" as possible nomenclature for trading projects. The commenter stated, "If this	Section 4.2 refers to EPD's review of all possible trading projects that could be included in a trading program, regardless of whether the project resulted in point source or nonpoint

is specifically about nonpoint source BMPs, then specify that. Unless this is about reviewing the trading program itself?"	source pollutant reductions. The following language was added to section 4.2.8, to help clarify expectations in this section: "For point source reductions, DMR data review and routine inspections of point sources conducted by EPD as part of regular compliance efforts may be sufficient to meet this verification requirement."
"If EPD or the permittee determines a trading project is not producing the expected reduction, the credit for that time period may be nullified or reduced, and the permittee's effective discharge adjusted accordingly." A commenter recommended that EPD modify this language to encourage a trading market while mitigating risk to receiving waters. The commenter believes that this language is a deterrent to permit holders who wish to trade because credits can be revoked at any time and without recourse.	EPD does not intend for this guidance document to encourage trading. Instead, this guidance document is intended to provide a framework for trading that would meet the requirements and goals of the CWA. If the nullification or reduction results in the permittee having insufficient credits to cover their discharge, then this could result in noncompliance. EPD would engage the permittee in compliance assistance and follow standard compliance and enforcement processes to return the permittee to compliance. Pathways to compliance could include purchasing additional credits, participating in an insurance pool, working with the credit generator to modify the trading project to increase credits generated, or other options. The following language was added to clarify: In Section 4.2: "EPD will review proposed trading plans to ensure that water quality standards are being met and that the credit-purchaser buys enough credits to cover their necessary load reductions. Point sources may purchase additional credits or participate in an "insurance pool" or similar bank to ensure sufficient credits have been purchased to meet the necessary load reductions, above and beyond any regulatory requirements."

	In Section 10.0: "EPD will use standard compliance assistance and enforcement policies and procedures to address water quality violations related to trading."
5. Conditions for eligible trades	
A commenter requested EPD consider adding "water quality" banks to the list of entities who can participate in trading. Water quality banks must seek approval under this program and demonstrate water quality improvements to the existing site condition before being authorized to enter a trade.	The following language has been added to section 5.1: "A separate "water quality" bank could be developed to generate credits for multiple buyers or serve as an "insurance pool" that serves a regional entity or group of point source permittees."
A commenter recommended breaking the section below "Who can participate in trading?" into nonpoint and point source trading participants.	This section does not differentiate between point and nonpoint trading participants because point sources could conduct NPS projects, so no change made.
A commenter suggested rewording first sentence under Section 5.3 to: "Facilities operating in the following categories of waterbodies may engage in water quality trading..."	Section 5.3 is specific to locations where trading can occur and isn't specific to the trading partner. In addition, the term "facilities" represents point source discharges and may unintentionally limit the inclusion of NPS related projects. No change made.
A commenter requested EPD provide link or EPD website address in Section 5.3.	EPD's website address (epd.georgia.gov) has been added.
A commenter noted that Section 5.3.1 seems to say nonpoint source project areas can only be downstream of NPDES discharge but also gives an option where nonpoint source projects can be upstream of NPDES discharge (option b). The commenter suggested it may be helpful to clarify the trading area.	The point of concern and the NPDES discharge point are not the same thing. Trading areas may extend downstream of or be established upstream of the NPDES discharge so long as it is upstream of the point of concern.
A commenter recommended that Section 5.4 read, "Only projects implemented after the trading baseline is met are eligible to generate credits."	EPD has added the following language to section 5.4 to clarify: "Projects in place at the time the baseline was established (for example, at the time the data was collected for TMDL development) cannot generate credits."
1. A commenter noted that, "a permit holder or bank will be hesitant to invest in a nonpoint source trading project only to have a large portion of credits generated assigned to a TMDL or other nonpoint source load reduction goal. We understand a	The requirement to meet the LA reductions of the TMDL is consistent with EPA guidance and necessary to ensure that water quality goals are met. EPA has published technical memos that specify LA reductions necessary before credits can

portion of the total credit generation may be used for other trading ratios such as uncertainty factors or delivery to compliance point. An individual BMP project cannot meet all watershed goals. Consider a 2% cap on total watershed load reduction credits required from any nonpoint source project or require other baseline standards such as an NRCS developed nutrient management plan on agricultural land." 2. A commenter stated that, "During the stakeholder meetings, it seemed that EPD was enunciating a policy that in trading areas where TMDL Plans apply, credits cannot be generated until loading reductions have been achieved to satisfy the loading reduction required under the TMDL Plan. The commenter is not sure that policy is apparent in the draft guidance and would appreciate clarification (e.g., by pointing us to this reference in the draft guidance or by revising the draft guidance to reflect this)." 3. A commenter stated that, "Watershed Load Allocation (LA) required reductions, before credit generation, is double counting. Although the commenter agrees credit generation should not be allowed for "bad actors" to meet baseline standards, there appears to be double-counting when implementing a nonpoint source project for point source credits. The current language states that credits will be taken off the top of any nonpoint project BEFORE any credits are allowed for point sources and before any other trading rations are applied. This will discourage nonpoint source trading project development."	be generated. New language has been added to Part 5.4.1 (paragraph below) to reflect this. "In 2014, US EPA published a technical memorandum titled, "Components of Credit Calculation," to provide additional information about water quality trading in the context of the implementation of the Chesapeake Bay TMDL. In the technical memorandum, EPA identified two baseline options: a practice-based and a performance-based baseline. EPD has selected the performance-based baseline approach, which "specifies the amount of load to be reduced, regardless of which practices are implemented to achieve that reduction, before credits can be generated." Using watershed data and TMDLs, EPD will determine the amount of load to be reduced for each waterbody in which trading is proposed. The amount of reduction necessary prior to credit generation will be specified in the trading plan, and the reduction will be verified with monitoring as outlined in Section 6.1."
A commenter asked, "Is allowing a portion of the pollutant reduction to be available as credits for trading an incremental baseline approach?" If so, the commenter suggests adding more	No, EPD is trying to convey a performance-based approach to credit calculation as specified in EPA's Credit Calculation Technical memo from 2014:

detail on reasonable assurance that the TMDL LA will be met over time.	"A performance-based baseline specifies the amount of load to be reduced, regardless of which practices are implemented to achieve that reduction, before credits can be generated. The performance-based baseline is defined as the difference between the pre-BMP and post-BMP per acre load based on pollutant inputs and geographical information entered into a model. The baseline should be calculated at a scale applicable to the credit generating practice, i.e., agricultural or other source." The following language has been added to section 5.4.1.1 for clarification: "These portions will be specific to the nonpoint source; if the TMDL requires one reduction for urban runoff and another for agricultural runoff, a project addressing urban runoff would first have to meet the required reduction for urban runoff."
A commenter suggested revising the sentences under Part 5.4.1 to read: "The current pollutant loading to the receiving water from specific sources is necessary to establish a baseline and thus quantify the reductions that would be needed from those sources to begin generating credits."	The first paragraph has been clarified and now reads: "A trading baseline is a snapshot of the conditions within the trading area coupled with legal requirements at the time of the waterbody's assessment and is typically based on when relevant water quality data was collected for a waterbody. For example, if a waterbody has a TMDL completed, the baseline would be established at the time that the data was collected for calculating the TMDL, or if water quality standards have been established for a waterbody, the baseline is the assumptions used to establish those water quality standards. Establishing a baseline is necessary to quantify the credits that can be generated through various trading projects."
A commenter recommended EPD revise section 5.4.1.1 to add that this may be allowable if the BMPs that are implemented to meet the baseline requirements are sufficient to meet said baseline.	The following sentence has been added to 5.4.1.1: "This would be allowable only if the BMPs that are implemented to meet the baseline requirements are sufficient to meet the baseline."

A commenter recommended EPD revise the third sentence in Section 5.4.1.1 to: “For nonpoint sources in watersheds where reductions are required to meet a TMDL-derived load allocation (LA), ...”	Change made. The sentence has been reworded as written.
A commenter recommended that Section 5.4.2.1 have language added in that projects must also meet the baseline to be eligible.	Section 5.4.2.1 has been revised to include: “Projects must generate pollutant reductions beyond current conditions and meet the baseline to be eligible for credit generation.”
6. Quantifying credits	
A commenter noted that, “Georgia should consider alternatives to in-lake, in-field, instream monitoring. Monitoring will be limiting participation to only large utilities or regional entities that can afford to design and implement a water quality monitoring project. Other states provide specific guidance for credit generation based on approved research.” “Not all pollutant reduction and ecological restoration projects lend themselves to direct water quality monitoring. These projects are truly beneficial but do not lend themselves to direct water quality monitoring.” “Accepted research rates and modeling to estimate pollution reduction and alternative monitoring such as vegetation density should be used to measure compliance. In addition, if direct water quality monitoring is not feasible, some states apply additional trading ratios to account for uncertainty.”	Monitoring is still required, and the following text has been added to section 6.1.2 to emphasize resources and opportunities for technical assistance: “US EPA has published a series of guidance documents for monitoring and evaluating nonpoint source projects. EPD will make these resources available, as well as provide additional technical guidance on the development and implementation of a monitoring plan during the trading plan review process.”
The guidance document states, “If the nonpoint partner is utilizing an existing credit-generating BMP, quantification will be based on load reductions measured through instream or in-field monitoring.” A commenter noted that the word "existing" is confusing, and asked, “does this mean a BMP eligible for credit generation?”	EPD anticipates that initially, most NPS projects will be new. But after some time, some projects may be “existing.” If a project is existing, monitoring data will be needed. If a project has not been constructed yet, modelling can be used for planning purposes. The following text was added to 6.1.2 for clarification: “For point-nonpoint trades, in situations where the NPS BMP has already been installed and is generating

	eligible credits, quantification will be based on load reductions measured through instream or in-field monitoring.”
A commenter agreed with the flexibility outlined for trading ratios, and stated, “a point to nonpoint trading minimum of 1.2 to 1 seems reasonable and that may include factors such as uncertainty, delivery, and other ratios. All ratios should be clearly explained and defined.”	The guidance document outlines the purposes of the various ratios; however, the specific ratios are not defined, because the ratios will be project specific.
In the guidance document it states, “Trading ratios are numeric values used to adjust the available portion of credits for sellers or the credit obligation of a buyer based on various forms of risk and uncertainty." A commenter noted that the portion of credits is also based on geographic factors.	Section 6.2 has been revised to include geographic factors as follows: “Trading ratios are numeric values used to adjust the available portion of credits for sellers or the credit obligation of a buyer based on geographic factors and various forms of risk and uncertainty.”
9. Incorporation of trading into NPDES permits	
A commenter asked whether any information on timing of initiating a Notice of Interest be included.	The Notice of Interest may be submitted at any time, including concurrent with the wasteload allocation request, after receiving a wasteload allocation, concurrent with the permit application, or during the term of the permit. To avoid an administratively extended permit, EPD suggests submitting the Notice of Interest as soon as possible. Section 9.1 has been revised to include the following clarification regarding timing: “The Notice of Interest may be submitted at any time.”
A commenter suggested including brief language in this section on duration of credits, as it bears repeating here	To reduce redundancy, EPD is maintaining the discussion on the duration of credits in Section 7.0.
A commenter suggested adding more specificity about possible "trading areas" in which bubble permits might be appropriate, such as distance between facilities. It may also be good to include info on enforcement mechanisms, as in where does responsibility fall for a shared limit, if exceeded? (or include in section 10.0)	The trading area must meet the requirements in section 5.3.1. A bubble permit could be developed to allow various trading scenarios involving multiple facilities spanning several counties or include an entire river basin. EPD does not want to restrict future trading scenarios. The trading area will be proposed by the applicant and approved by EPD.

	Information regarding enforcement is included in section 10.0.
11. EPD internal coordination	
A commenter requested EPD make sure this info is included in the earlier section 9.0: "Trading plans will be incorporated into the NPDES permit and subject to a 30-day public notice period."	Section 9.0.5 now states: "The trading plan will be incorporated in the NPDES permit and will be subject to public notice and comment during the permit issuance or modification process."
A commenter supports the following language, saying it provides adequate time to address any problems or violations: "If the permittee has not secured an adequate credit balance to meet its established effluent limits, the WCP will initiate standard escalating enforcement procedures and compliance assistance to return the facility to compliance."	Comment noted.
Appendix B – How to develop a trading plan	
A commenter suggested that a trade be valid for one five-year permit cycle and be re-evaluated as part of a permit renewal, noting that doing so would be consistent with many other NPDES approaches.	The document does not prescribe the life of a trading project, but rather provides guidance on the life of credits that are generated by trading projects. EPD recognizes that trading projects may have different lifespans and that parties may have a lot of considerations in determining the duration of each trade with each trading partner. As noted in Appendix B, Section 1.0, a trading plan must be proposed concurrently with the NPDES permit issuance, reissuance, or modification and becomes an enforceable part of the permit.
A commenter requested clarification regarding the following language in the "Eligible Credits" section, item 3: "For waterbodies that require nonpoint source load reductions, trading projects installed and maintained by nonpoint sources will generate credits at a ratio, which will be calculated based on the LA reductions necessary to meet the TMDL. The rest may be available for trading: no double counting." The commenter	Additional language has been added to Section 5.4.1 of the main document to address this comment: "In 2014, US EPA published a technical memorandum titled, "Components of Credit Calculation," to provide additional information about water quality trading in the context of the implementation of the Chesapeake Bay TMDL. In the technical memorandum, EPA identified two baseline options: a practice-based and a performance-based baseline. EPD has selected the performance-based baseline approach, which "specifies the

requested clarification on how the portion of credits necessary to meet the TMDL may be defined.	amount of load to be reduced, regardless of which practices are implemented to achieve that reduction, before credits can be generated." Using watershed data and TMDLs, EPD will determine the amount of load to be reduced for each waterbody in which trading is proposed. The amount of reduction necessary prior to credit generation will be specified in the trading plan, and the reduction will be verified with monitoring as outlined in Section 6.1."
A commenter asked if EPD would be able to provide a progress status of the agriculture and urban load reductions in TMDLs, so that utilities will have a clear understanding of when a conceptual non-point to point nutrient trading proposal would be able to receive the full credit for reductions.	EPD does not have the ability to track the progress in LA reductions in the TMDLs directly. Only projects funded through 319(h) grants are tracked by EPD and reported to US EPA through the Grants Reporting and Tracking System (GRTS).
A commenter asked how the LA reductions from a TMDL, once achieved, would affect trading project implementation. The commenter noted that it would be good to have that item addressed in the guidance document.	If the LA reduction is met, then new BMPs, installed after the LA reduction has been met, would be above and beyond the required TMDL reductions. All credits generated by the new BMPs could be traded. Existing BMPs would continue to meet TMDL reduction.
A commenter asked whether EPD would expect the requirements of the trading guidance to be followed for entities wanting to make a significant reduction in loading outside of the trading platform.	EPD has no such expectation.
1. A commenter made a suggestion regarding treatment of credits for trading projects that fail to meet performance standards or the conditions of the trading plan. The suggestion was, instead of cancelling a trade, to use an approach similar to that used for violations of other NPDES parameters, where a violation is addressed through a compliance schedule. 2. A commenter expressed concern over the focus on a one-year period and suggested that a compliance schedule or escalating enforcement action be used prior to cancelling a trade. They noted that while uncertainties with trades are partly addressed	For clarification, the document addresses the cancellation of credits, not of trades. When the performance standards or the conditions of the trading plan are not met, the credit amount will need to be adjusted and the permittee must make alternative arrangements (or have an insurance pool) to ensure they meet their permit limits. Language has been added to section 4.2 for clarification: "EPD will review proposed trading plans to ensure that water quality standards are being met and that the credit-purchaser buys enough credits to cover their necessary load reductions. Point sources may purchase additional credits or participate in an "insurance pool" or similar bank to ensure sufficient credits have been purchases to

in the use of trading ratios, further protections could be put into place without cancelling a trade. 3. A commenter stated that the language in the document is a deterrent to permit holders who wish to trade because credits can be revoked at any time and without recourse. *(Note: a similar comment was provided for Appendix C. That comment is addressed through this response as well.)*	meet the necessary load reductions, above and beyond any regulatory requirements." EPD has also added language regarding compliance processes to section 10.0 and Appendix B, section 3.10: "EPD will use standard compliance assistance and enforcement policies and procedures to address water quality violations related to trading."
A commenter asked whether EPD plans to provide additional guidance on the sampling methodology required to validate that the proposed BMPs are meeting their design load reductions.	EPD will not provide additional broad guidance on sampling methodologies because the monitoring plans will be specific to the trading projects included within each unique trading plan. EPD will provide additional guidance, as needed, on a case-by-case basis.
The commenter expressed support for the following language, saying it provides adequate time to address any problems or violations: "The permittee will have 60 days from the failure event to implement a plan for remedy, including performance benchmarks and the conditions under which credits will be suspended or cancelled."	Comment noted.