



November 18, 2019

To: Office of Water, EPA

Subject: Comments on Water Quality Trading Under the National Pollutant Discharge Elimination System Program (84 Fed. Reg. 49,293, Sept. 19, 2019)

Docket: EPA-HQ-OW-2019-0415

I served as the consultant to the Administrative Conference of the United States (ACUS) on their 2017 *Recommendations on Marketable Permits*.¹ While these comments do not purport to reflect the views of ACUS, they are heavily informed by both the final ACUS *Recommendations on Marketable Permits* and my consultant's report. In fact, a main comment is that EPA should consult and follow the ACUS recommendations where applicable. These comments hereby incorporate both the ACUS recommendations² and my consultant's report.³

I am also the Legal Director for the Institute for Policy Integrity at New York University School of Law.⁴ Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy. Policy Integrity supports well-designed market-based regulatory programs that increase efficiency without sacrificing policy goals. Policy Integrity has previously submitted comments to EPA on how to expand the deployment of efficient, well-designed water quality trading programs, and these comments hereby incorporate our previous submissions.⁵

These comments focus primarily, as requested, on EPA's various proposed policy options to boost water quality trading by changing how nonpoint sources generate credits, especially with respect to their baselines. The comments also address, as requested, other policy ideas to promote market-based programs that will improve water quality.⁶

EPA Should Clarify Its Proposals and Reissue Them for Public Comment

EPA should provide additional clarity on its proposals and then reissue them for public comment before recommending any of them to be implemented in current or future water quality trading programs.

¹ 82 Fed. Reg. 61,728, 61,730 (Dec. 29, 2017), also available at ACUS, *Recommendation 2017-4: Marketable Permits* (2017), <https://www.acus.gov/sites/default/files/documents/Recommendation%202017-4%20%28Marketable%20Permits%29.pdf> [hereinafter ACUS Recommendations].

² *Id.*

³ Jason A. Schwartz, Final Consultant Report on Marketable Permits: Recommendations on Applications and Management (2017), <https://www.acus.gov/sites/default/files/documents/Marketable%20Permits%20Report-final.pdf> [hereinafter ACUS Report].

⁴ This document does not purport to present New York University School of Law's views, if any.

⁵ Comments from Policy Integrity, to EPA, on Water Quality Trading under the Clean Water Act (Oct. 1, 2012), https://policyintegrity.org/documents/Policy_Integrity_Final_Water_Quality_Trading_Letter.pdf (recommending, for example, new regulation to provide certainty to the water quality program both under and outside of TMDLs, as well as consideration of trading in the context of TBELs, and use of an auction-structure to build market-based regulatory programs for water quality); Comments from Policy Integrity, to EPA, on Executive Order 13,777 (May 15, 2017), https://policyintegrity.org/documents/2017-05-15_-_Policy_Integrity_Comments_-_EPA_Evaluation_of_Existing_Regulations.pdf (reviving our prior recommendation for a modification to 40 C.F.R. § 122.4(i) to more clearly authorize water quality trading).

⁶ 84 Fed. Reg. at 49,297.

ACUS recommends that “Agencies should establish and publish clear guidelines containing all of the features of marketable permit programs, including expectations as to the longevity of marketable permits and the precise obligations or authorizations that they convey,” and also that “Agencies should generally consider using notice-and-comment rulemaking when creating a marketable permitting regime, both in order to reduce uncertainty . . . and to gather public input that may prove beneficial in shaping the program.”⁷ As they appear in the *Federal Register*, EPA’s proposals do not offer sufficiently clear guidance to either reduce uncertainty or allow for meaningful public input.

The September 2019 *Federal Register* notice is too vague on several key points to allow effective public comment. For example, the first option EPA suggests is a redefinition of “baselines.” Overall, this proposal fills just over a single column of text in the *Federal Register*,⁸ and the central “language” on which EPA “seeks comments on whether this language provides the clarity necessary to support market-based programs” seems to refer to barely two sentences of text: namely, “EPA recommends that nonpoint sources be allowed to generate credits for any pollutant reductions the nonpoint source makes that are not included in the assumptions that support the TMDL load allocation. Under this revised baseline definition, any such pollutant reductions would be immediately available for use by point sources as credits.”⁹

Many key phrases in that proposed “language” remain vague or undefined, and EPA does not explain how this new language would fit into the broader, existing guidelines for water quality trading. For example, what is the exact meaning of the credits becoming “immediately available”? Does that language imply any change in the approach or timeline for verifying that credits will be real and additional? If a nonpoint source’s credit-generating activity is performed before any formerly “baseline” best management practices that the TMDL load allocation otherwise assumed would be implemented, how will the states or EPA verify that such credit-generating activities will result in truly “additional” pollutant reductions?¹⁰ Furthermore, does the new language making credits “immediately available” imply any change in the need for credits to represent permanent reductions in pollution, or in the transfer of liability for noncompliance? Can a nonpoint source “immediately” sell a year’s worth of credits in advance of any on-the-ground pollution reductions, even if, six months in, through perhaps a natural disaster or fraud or default, the pollution reductions prove to be illusory? None of these questions, or related questions, are answered.

Nor does the *Federal Register* notice provide any examples of what, concretely, the proposed change in baseline will actually mean. Meanwhile, the archived public listening session from October 2019 provides only a single example,¹¹ but explicitly referred to it as the “easiest example,”¹² and indicated that the disclosure of that one example was prompted by the fact that EPA had “gotten a lot of

⁷ ACUS Recommendations, *supra*, at page 10, recommendations #1 & #2.

⁸ 84 Fed. Reg. at 49,295.

⁹ *Id.*

¹⁰ See *infra* for more on how the *Federal Register* notice fails to explain how the various proposals will ensure that credits will be real and additional.

¹¹ The example being that, previously, a nonpoint source subject to a TMDL that assumed it would follow the best management practice (BMP) of installing fencing to keep livestock out of waterways would first need to install that fencing before it could generate any credits through additional controls, such as planting cover crops; but now, with the proposed change, the nonpoint source could first generate credits by planting cover crops, without necessarily having installed all BMP fencing. See EPA, Transcript of Water Quality Trading under the National Pollutant Discharge Elimination System Listening Session, Oct. 21, 2019, at 17-18, https://www.epa.gov/sites/production/files/2019-11/documents/water_quality_trading_under_npdes-listening_session_transcript.pdf [hereinafter Listening Session].

¹² *Id.* at 17.

questions.”¹³ That volume of questions received proves the public’s need for more concrete examples—and not just for examples of the “easiest” case, but a fuller exploration of how this proposed change will be implemented in practice.

EPA also provides no evidence for its claim that the proposed policy changes are necessary because “substantial upfront costs for nonpoint sources”¹⁴ are preventing water quality trading programs from being “implemented to their fullest potential.”¹⁵ While the recent stakeholder meetings that EPA and USDA have conducted on water quality trading have collected useful feedback and could contribute to important insights, overall evidence on both economic efficiency and environmental effectiveness remains thinner for water quality trading programs than for other market-based programs, like in the air pollution context.¹⁶ EPA has in the past expressed a commitment to periodic assessments of water quality trading,¹⁷ and the agency should fulfill that promise by collecting, releasing, and analyzing data on the efficiency and effectiveness of water quality trading. In the context of this proposal specifically, EPA should more fully examine the evidence on why water quality trading has been slow to develop, disclose its evidence to the public, and then explain why it thinks its policy proposals are the optimal solutions to the actual challenges facing water quality trading programs.

Additionally, while the *Federal Register* notice explicitly focused on “policy options regarding nonpoint source baselines for water quality trading *in areas with a TMDL*,”¹⁸ which EPA characterized in the listening sessions as “looking at a very narrow sliver,”¹⁹ EPA also indicated in the listening session that the policy proposals “could apply in many of those other scenarios,” such as in trading *outside of a TMDL*.²⁰ If the proposals potentially have a much broader scope of application than indicated in the *Federal Register* notice, EPA should clarify the scope of its proposals and then reissue them for additional public comment.

Because the public needs more details to assess the real-world effects of the proposed policy options, EPA should not recommend use of any of these policy options in water quality trading programs without first providing more details and offering another opportunity for public comment.

EPA Scarcely Mentions the Key Concept of Additionality, and Never Mentions Fungibility of Credits

In defining a proper baseline against which to measure credits, a key concept is additionality. Credits must always be “for lack of a better word, real”²¹: credits must be additional and measured against a realistic baseline; credits must be quantifiable and certain (or else adjusted by a reasonable uncertainty ratio); credits must represent some degree of permanence and guaranteed execution; credits must not cause leakage; credits must not be double counted.²² According to ACUS’s recommendations, “verifying that credits represent real offsets” is an important aspect of designing any marketable permit program.²³

¹³ *Id.*

¹⁴ 84 Fed. Reg. at 49,295.

¹⁵ *Id.* at 49,294.

¹⁶ ACUS Report, *supra*, at 31, 69-70.

¹⁷ EPA, Water Quality Trading Policy, 68 Fed. Reg. 1609 (Jan. 13, 2003).

¹⁸ 84 Fed. Reg. at 49,295 (emphasis added).

¹⁹ Listening Session, *supra*, at 13.

²⁰ *Id.*

²¹ ACUS Report, *supra*, at 55.

²² *Id.* at 55-58.

²³ ACUS Recommendations, *supra*, at 11, recommendation #6.

Yet throughout the entire *Federal Register* notice, there is only a single and somewhat vague reference to the need for a nonpoint source's credits to be "in addition to reductions described in [TMDL] plans to achieve the load allocation."²⁴ There is no meaningful discussion on how any of the policy proposals will guarantee that credits will remain additional and verifiable. For example, under the existing approach to baselines and credit generation, pollution reductions from nonpoint sources must be verified as additional against a baseline that includes meeting any applicable load allocations under a TMDL, for instance by already installing certain best management practices at the nonpoint source. If now, instead, a nonpoint source could "immediately" generate credits from other activities without first implementing such best management practices, how will the states or EPA verify that the credit-generating pollution reductions will be additional? Will allowing the "immediate" generation of credits change the nonpoint source's incentives to implement other assumed best management practices? If the pollution-reduction pathways of the credit-generating activity overlap with how the best management practices would have reduced pollution, are the reductions still additional? EPA has not begun to grapple with any such questions.

At the end of the proposed redefinition of baselines, EPA also poses for comment "whether pollutant reductions used to generate credits could also be used to achieve a TMDL load allocation."²⁵ Presumably, the agency meant that the same actions of a nonpoint source could potentially be used both to generate credits and to meet the nonpoint load allocation. EPA never explains if or how such an arrangement could work without compromising the principle of additionality. Even if EPA were correct that load allocations to nonpoint sources "on their own are not legally enforceable pollutant control 'requirements,'"²⁶ credits should be awarded only to activities that would not have occurred but-for the financial incentive to generate credits; if certain activities were already anticipated from nonpoint sources pursuant to the TMDL load allocations, whether due to federal or state legal requirements or community norms or other factors, EPA will need to explain how such activities could be permitted to simultaneously satisfy load allocations and also generate "additional" credits.

The proposal on "incremental baselines" also fails to grapple with additionality. EPA proposes that nonpoint sources' pollution reductions could be divided by some ratio, with some pollution reductions counting immediately toward credit generation, and the remaining proportion counted against the load allocation.²⁷ EPA suggests the ratio of credit-generating reductions to load-allocation-satisfying reductions could be set by reference to a variety of policy factors, including geography or "ability to pay."²⁸ Yet the need to ensure that credits are additional is never mentioned as a factor in setting such an "incremental baseline."

²⁴ 84 Fed. Reg. at 49,295.

²⁵ *Id.* at 49,296.

²⁶ *Id.* at 49,295. The *Federal Register* notice does not include any statutory analysis or caselaw to support this claim. It is not at all clear—under all applicable state statutes and regulations, federal statutes and regulations, and judicial interpretations—that no load allocations to any nonpoint sources would ever be legally required. EPA has also not explained why "legally enforceable," as opposed to a legal requirement absent enforceability, is the correct standard for the baseline. Indeed, usually a baseline for generating credits should include all actions that would happen without the financial incentive provided by the credits, including not just all legal requirements, but any voluntary actions that would occur anyways, such as through community norms or businesses seeking PR value. EPA also fails to assess how, regardless of legally enforceable requirements to nonpoint sources, expectations about nonpoint sources' load allocations may influence other requirements under the TMDLs, such as the responsibilities otherwise assigned to point sources.

²⁷ *Id.* at 49,296.

²⁸ *Id.*

The proposals for alternate compliance schedules and variances seem to contemplate letting point sources take credit immediately for some yet-to-be-generated future offsets from nonpoint sources.²⁹ These proposals would, effectively, allow the borrowing of future credits. Borrowing can enhance the cost-savings of a trading program, but unless the issues of additionality and fungibility are addressed, borrowing can undermine the environmental effectiveness of a trading program. First, on additionality, to take credit now for future activities, some guarantees of performance must be in place, as well as perhaps sanctions or compensatory mitigation requirements for any future failures of performance.³⁰ Yet in these policy proposals, EPA does not grapple with any of those concepts. Second, on fungibility, the agency must explain why it is comfortable trading future pollution reductions for current ones. Some types of pollution, like greenhouse gas emissions, are somewhat temporally fungible at least over a few years, in that the damage from a ton of carbon emissions released next year is only marginally different than the damage from a ton of carbon emissions released this year. Yet it is not clear—and EPA has not explained—why, given the specifics of water quality science and epidemiology, states or EPA should automatically be comfortable trading an increase in water pollution this year for the promise of a decrease in pollution at some unspecified future date. (EPA indicates, for example, that the variances could last for “longer than five years.”³¹) Note that the policy EPA adopted in the February 2019 *Memorandum* approving of the banking of credits for future use and considering the approval of credits on a “look-back basis,”³² could also raise concerns with additionality and fungibility: allowing future credits to be generated by activities and pollution controls that were completed and in place before a trading framework existed (i.e., a “look back”) raises additionality concerns that the agency did not address, and allowing current pollution reductions to be banked for use at some unspecified point in the future, with no discussion of credit lifespan, could raise issues of fungibility. On the issue of temporal fungibility, see also ACUS’s recommendation to be “clear” about “the longevity of marketable permits,” which would include clearly defining the lifespan of credits.³³

To the extent that the proposal on an in-lieu fee program also contemplates that point sources may receive some advance credit for future, yet-to-be-achieved pollution reductions at nonpoint sources, that timing structure could also raise concerns about temporal fungibility that EPA has not addressed. From the short discussion about the possibility of a reverse auction, it is not immediately clear when the nonpoint source bid-takers would be expected to complete their pollution reductions in relation to when point sources paid into the in-lieu fee program fund.³⁴ For general advice on structuring a reverse auction in the context of a market-based regulatory program, EPA may want to consult with the Federal Communications Commission, which has conducted reverse auctions to reallocate electromagnetic spectrum. For more specific advice on the timing of in-lieu fee programs, EPA should take note that the Army Corps of Engineers limits the number of credits available in advance of performance under the

²⁹ *Id.* at 49,296 (“a permitting authority might consider including a compliance schedule in the permit to account for the time it would take for a nonpoint source partner to generate sufficient pollution reduction credits or offsets to achieve compliance with the NPDES permit WQBEL”); *id.* (“a WQS variance might be designed to ensure that at the end of the WQS variance, enough pollutant reduction credits would be generated by nonpoint sources to meet the point source’s WQBEL”).

³⁰ ACUS Report, *supra*, at 56-57.

³¹ 84 Fed. Reg. at 49,296.

³² EPA, *Updating the Environmental Protection Agency’s Water Quality Trading Policy to Promote Market-Based Mechanisms for Improving Water Quality* at 4 (Feb. 2019), <https://www.epa.gov/sites/production/files/2019-02/documents/trading-policy-memo-2019.pdf>.

³³ ACUS Recommendations, *supra*, at 10, recommendation #2.

³⁴ 84 Fed. Reg. at 49,297.

wetland bank in-lieu fee program,³⁵ and that the Fish and Wildlife Service has an explicit preference for advance mitigation of habitat losses, and when advance performance of the credit-generating activity is not possible, the Service recommends an increased trading ratio to reflect any temporal species losses.³⁶ Those examples are cited not to necessarily endorse the precise regulatory approaches taken in those permit bank and in-lieu fee programs, but rather to indicate that other agencies have recognized that liberally allowing credits in advance of performance creates problems.

The failure to discuss the key concepts of additionality and fungibility in the various policy proposals further strengthens the case for EPA needing to reissue a more detailed proposal for additional public comment before recommending any of the policy proposals for implementation in a water quality trading program.

(Note that EPA's 2019 Memorandum, in defining as its fifth principle that "a single project may generate credits for multiple markets," also failed to meaningfully grapple with the concept of additionality.³⁷ While credit stacking does contain great promise to promote regulatory markets, regulators must be careful to ward against double-counting or inefficiently over-rewarding behavior that would have happened even without the financial incentives of the stacked credits.³⁸)

Other Ways to Increase the Demand for Water Quality Trading

Historically, the "build and they will come" approach has not worked well for water quality trading: rather, "sufficient supply and demand must exist to create a competitive and efficient market."³⁹ The slow development of TMDLs, for example, has slowed the demand for cost-saving trading opportunities.⁴⁰ Even where TMDLs exist, if the overall standards are too weak, there will still not be enough demand for cheaper pollution-reduction opportunities to support a market.⁴¹ EPA should strongly consider ways to speed the establishment of properly set TMDLs as a means to support the demand for water quality trading.

Policy Integrity's previous comments to EPA on water quality trading also encouraged EPA to think about ways to foster trading outside the context of TMDLs, including by resolving still-lingering legal uncertainty by modifying 40 C.F.R. § 122.4(i) to more clearly authorize water quality trading, and by considering the potential application of trading to technology-based effluent limits.⁴²

Indeed, besides the need to modify 40 C.F.R. § 122.4(i), there may still be lingering uncertainty among stakeholders and state regulators about how water quality trading interacts with anti-degradation and anti-backsliding requirements. As recently as 2015, lack of legal certainty and clarity was still cited

³⁵ Of course, EPA is also involved in the management of that program. It was therefore somewhat surprising that EPA asks for public comments on examples of existing in-lieu fee programs, 84 Fed. Reg. at 49,297, without any mention of the wetland bank and in-lieu fee program. That said, seeking advice from other agencies with relevant expertise is of course a good idea, see ACUS Recommendation, *supra*, at 12, recommendation #12 ("Agencies that manage marketable permitting programs should coordinate with other agencies and authorities that have expertise to improve marketable permitting programs.").

³⁶ ACUS Report, *supra*, at 47.

³⁷ EPA, *Updating the Environmental Protection Agency's Water Quality Trading Policy to Promote Market-Based Mechanisms for Improving Water Quality* at 5 (Feb. 2019), <https://www.epa.gov/sites/production/files/2019-02/documents/trading-policy-memo-2019.pdf>.

³⁸ ACUS Report, *supra*, at 57.

³⁹ *Id.* at iii.

⁴⁰ *Id.* at 49 n.446 (citing the *Report on the 2015 National Workshop on Water Quality Markets*).

⁴¹ *Id.* at 49.

⁴² See Policy Integrity's 2012 comments, *supra*.

prominently by stakeholders as a reason for the slow development of water quality trading.⁴³ Policy Integrity's 2012 comments made recommendations on these issues.⁴⁴

Other Market Structures Could Facilitate Water Quality Trading

Several other market-based structures that could facilitate water quality trading are not explored in EPA's proposals. For example, the in-lieu fee program is not the only arrangement that can address problems such as the asynchronicity between when buyers need credits and when nonpoint sources can generate credits. Private credit aggregators can also fill the role of pooling credits and providing upfront funding so that real credits will be available when buyers need them.⁴⁵ Aggregation, whether done through private parties or a government-sponsored fund, could also have the benefit of focusing on larger-scale credit-generation projects, which can deliver economies of scale as well as environmental benefits.⁴⁶ There could be a tradeoff between the administrative efficiencies of relying on private parties for aggregation of credits, versus certain control over policy outcomes from operating a government-run fund to aggregate credits. EPA should consider such tradeoffs.

Besides turning the entire responsibility for managing credits over to a government-run in-lieu fee program, a state-established centralized pool of reserve credits for noncompliance could be another useful structure. In particular, to the extent uncertainty about being liable for noncompliance in the event that a nonpoint source fails to deliver real credits is preventing market participation, a reserve pool could help promote market participation. Indeed, EPA has in the past recommended that states consider this option,⁴⁷ and ACUS also recommends that agencies consider use of devices like "reserve pools."⁴⁸ EPA could now revive and expand on this recommendation.

Finally, Policy Integrity's 2012 comments recommended that EPA consider allowing and encouraging an auction-based approach to water quality regulation.⁴⁹ In existing water quality trading programs, permission to discharge a pollutant is initially allocated for free to individual sources. This is easiest to see in the context of TMDLs. In these programs, the regulatory entity establishes an overall amount of a pollutant that may be discharged by all sources in order to reach the relevant water quality standard. This overall amount is then divided among sources, with sources being allowed, for free, to continue discharging pollution up to their set standards. If a TMDL program allows trading, sources with a low cost of reduction will typically sell some portion of their initial discharge limit to sources with a high cost of reduction; the sources with a low cost of reduction get to keep the value of their freely allocated pollution allowances. If an auction were instead incorporated as part of a TMDL trading program, the initial rights to discharge would not be freely distributed to individual sources. Sources would instead purchase these rights from the government. Further trades between sources could still occur after the auction. An agency could also choose to only auction a portion of the overall amount of allowable discharge.

States' broad authority under the Clean Water Act to design and implement TMDLs should allow for auctioning, just as it allows for trading. The revenue from auctions would help states overcome the financial hurdles to developing TMDLs and implementing trading programs. Policy Integrity's 2012

⁴³ ACUS Report, *supra*, at 23 (citing *Report on 2015 National Workshop on Water Quality Markets*).

⁴⁴ See Policy Integrity's 2012 comments, *supra*.

⁴⁵ ACUS Report, *supra*, at 72.

⁴⁶ *Id.* at 34.

⁴⁷ See ACUS Report, *supra*, at 62-63 (citing the 2003 Water Quality Trading Policy).

⁴⁸ ACUS Recommendation, *supra*, at 11, recommendation #9.

⁴⁹ https://policyintegrity.org/documents/Policy_Integrity_Final_Water_Quality_Trading_Letter.pdf.

comments further detail the economic and environmental advantages from an auction-based approach to water quality management.

Conclusion

EPA should not recommend any of the proposed policy options. EPA first needs to clarify key elements of its proposals, explain how its proposals will not undermine the goals of additionality and fungibility, and consider other alternatives to achieve the goal of facilitating water quality trading, including by increasing the demand for trading (such as by establishing more TMDLs) and through use of alternate market-based structures (such as auction-based approaches to allocation under TMDLs). Afterward, EPA should reissue a new set of proposals for public comment.

Sincerely,

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