

Agriculture Workgroup (AgWG) Extension of RI-9,10 Practice Credit Duration Response to EPA Vote

Materials/Background

- April Presentation to AgWG: [presentation](#)
- April 2023 AgWG minutes: [minutes](#)
- FWG Proposal to extend credit durations of select forestry practices (approved by the WQGIT in Aug 2021): [proposal](#)
- RI practice definitions and visual indicators report (approved by AgWG in 2014): [RI report](#)
- [Acronym List](#)

Proposed ask from the BMPVAHAT/FWG to the AgWG:

Does the AgWG support the extension of credit durations of Resource Improvement RI 09 “Exclusion Area on Watercourse” and RI 10 “Forest Buffer on Watercourse” from 10 to 15 years?

Vote & Rationale:

The EPA votes **HOLD** on the requested credit duration extension for Resource Improvement RI 09 “Exclusion Area on Watercourse” and RI 10 “Forest Buffer on Watercourse” from 10 to 15 years. In order to move from a hold, the EPA would request closer examination of how to deal with the following:

- 1) Demonstrate that the standards and specifications including function, tree density, canopy cover, survival rate, no concentrated flow, frequency for inspection and maintenance are equivalent between federally funded and RI practices.
- 2) Define how RI practices will differ from federal funded practices.
- 3) Clearly define how the move to make RI and NRCS practices equivalent will impact the current ability to report RI practices.

Responses to EPA Requests

KEY: **Blue** = request from EPA

Red = response from Forestry WG representatives

REQUEST 1: Demonstrate that the standards and specifications including function, tree density, canopy cover, survival rate, no concentrated flow, frequency for inspection and maintenance are equivalent between federally funded and RI practices.

RESPONSE 1:

Due to the inherent definition of RI practices, the standards and specifications of RI practices are not required to meet federal standards. They can, and most likely will, differ. The FWG does not claim that the standards and specifications of RI practices and NRCS practices are, or should be, the same; but rather, that the functionality of these practices provide similar water quality resource improvement (i.e., the RI practices contain the critical elements necessary for water quality resources improvement, which is demonstrated and validated during the initial verification of the practice when the visual indicators are confirmed).

The FWG acknowledges that not every RI practice will and should have the equivalent credit duration as their federally funded counterpart simply because they provide water quality resource improvement. The original RI practice technical panel developed credit durations for each practice based on best professional judgement. Nearly all of the RI practices were given about half the credit duration of their NRCS equivalent. The exception to this was RI-9 and 10 practices, which were given credit durations that were the same as the credit durations of their federally funded practices equivalent.

The FWG defers to the reasoning of the RI technical panel that originally developed the credit durations for these practices in 2014 as to why they were equivalent to the credit durations of NRCS practices. While there is no written documentation as to why the panel decided to make them the same, here are some responses from members who served on the RI report technical panel:

"I didn't find any documentation, but I also recall rigorous discussion throughout. For RI9,10, I think it came down to the resiliency of established trees/shrubs, regardless of how they took root on the converted cropland. I recall experienced-based reasoning (i.e., conservation professionals in their regions reflecting on forested buffers they've observed for years) that well established riparian trees/shrubs verified as meeting the RI9,10 criteria are just as likely to remain in place and be effective as ones installed through a public cost-share program using NRCS CPSs, i.e., they each have similar chances of thriving or declining (e.g., flood, disease, farmer removal), so the same credit duration should be applied. This still makes sense to me."
– Greg Albrecht, NYSDEC.

"The one thing I do remember is that there was a lot of discussion about almost every BMP, as the NRCS had some serious reservations about what was being proposed. Nothing slipped through the cracks that I was aware of, so there must have been a good reason for the credit durations matching." – Jeff Hill, YCCD.

The FWG notes that this report, including the equivalent credit durations given to the RI and federally funded practices, was accepted by EPA when the initial report was approved by the AgWG in 2014.

In addition, the FWG provided expertise on this topic because the BMP is within their source sector, and the WG is the responsible party for the Forest Buffer outcome in the Chesapeake Bay Watershed Agreement. The source sector experts stated the following regarding this issue:

"I would add that many of the buffer plantings reported to the Bay model are not federally sourced. We provide technical assistance to all, and don't see that federal requirements are needed to reliably have buffers survive and grow."

*For us, the RI practices would be reported by MDA, based on their staff's field visits confirming forest buffer presence on farms. Established buffers are likely to survive much more than 15 years, even for shorter lived trees such as silver maple, box elder, black locust, or Virginia pine, where they may start declining at 50-70 years. To get to a restored Bay, we really need the forest buffers on many waterways, and **a 15-year credit duration seems reasonable based on the inherent biology and ecology of established young forest, as well as incentive to the agencies to support retention of the buffers in their communication and policies.***

If they are interested in a field visit to see the types of situations these represent, we can work with MDA to look at some.” – Anne Harrison-Strang, Maryland Forest Service

*“The states who care about extending the RI credit lifetime should be speaking up, to affirm that when RI projects involving tree buffers are credited, it means they have been properly installed and verified as to **successful establishment. If the buffer is healthy and living at 3-5 years (establishment), then it's likely to be functioning at 15 years even if the original planting was done voluntarily by the farmer, and not according to an NRCS standard.**” – Rebecca Hanmer, Forestry Workgroup Chair*

REQUEST 2: Define how RI practices will differ from federally funded practices.

RESPONSE 2:

The definitions of RI practices and federally funded practices will not be affected by the extension of RI-9,10 practice credit durations. RI practices differ from federally funded practices in that they may lack the contractual provisions of cost-shared BMPs, as well as the corresponding implementation and maintenance oversight from the federal agency. While federal agencies such as NRCS may not be providing that oversight, the initial verification of the practice will require the verifier to confirm that all visual indicators are present signifying that the practice contains all critical design elements necessary for water quality resource improvement.

There are many instances where the landowner may need to install an RI practice instead of a cost-shared practices. For example, some cannot accept a government subsidy:

- Plain Sect Farmers (Amish, Mennonite Farmers as examples)
- Farms owned by corporations that cannot accept federal funding due to the payment limitations.”

Other landowners voluntarily install these practices for reasons such as environmental stewardship.

REQUEST 3: Clearly define how the move to make RI and NRCS practices equivalent will impact the current ability to report RI practices.

RESPONSE 3:

Extending the credit durations of RI practices to be the equivalent to NRCS practices **will not impact** the current ability to report RI practices, as the credit durations have been equivalent since the initial RI practice report was established and approved in 2014. It wasn't until the 2021 WQGIT decision item to extend NRCS practice credit durations to 15 years that there was a difference between the credit durations of RI and NRCS practices. Therefore, the decision to make the credit durations equivalent again will not affect the ability to report RI practices.

Additional Comments and Considerations from the FWG

For Reference: [Rationale](#) for extending cost-shared practice credit duration

The reasoning for the extension of cost-shared practices to 15 years was due to the following:

- Contract length: the great majority of CREP forest buffers have a 15-year contract commitment for annual rental payments, which includes required maintenance. Contracts are administered and performance overseen by USDA. Contracts can be extended another 15 years, after the initial contract period.
- Landowner investment: the establishment of a forest takes considerable investment and the landowner is unlikely to convert after establishment (see Basis of Practice Life below).
- Consultation with forester: forest plantings have a higher bar for planning, implementation and establishment and are therefore more likely to persist.

Basis for Practice Life

For Forest Plantings:

1. A forest established after 15 years is unlikely to be converted (compared to a grass buffer or single tree). One reason is because it is difficult to remove these trees. Also, multiple landowner surveys have shown that 80-88% of landowners intend to keep their new forest buffer indefinitely (English and Hyberg 2019, Cooper 2005, Fesco 1982).
2. Forests are naturally regenerative.
3. All Forest Plantings (buffers and urban forest planting BMPs) receive management and are often overseen by foresters (receive planting plan, pre-treatment, and maintenance).

After 15 years, all tree planting practices will be picked up by the high-resolution land use data. Agricultural Forest buffers will be modeled as Land Use after 15 years, like the other tree planting practices, but are also eligible for upland credit in NEIEN if re-verified at that time.

Tree Practices and Land Cover Data: Many tree plantings are reported to NEIEN as dispersed practices and are difficult or impossible to revisit. Fortunately, the extent of trees and continued tree survival can be monitored using high resolution land cover imagery. Land cover imagery shows tree mortality instantly and tree growth gradually so as landowners and contractors replace trees, and trees and forests replace themselves, it is the land cover data that provide the best indication of the extent of tree survival and occurrence on the landscape. In most of the watershed as in the rest of the country, the impact of tree planting is considerably smaller than the loss of trees to development. The new high-resolution land cover change data is providing further proof of this. Therefore, the Land Use module of CAST gives a more accurate impression of the impact of tree practices on the landscape than NEIEN.

Once established, forests can grow indefinitely with little maintenance-- even in the event of a natural disaster (flooding, ice storms, etc.) -- as they are the natural land cover for this region. Some practices have a consistently higher standard of planning, implementation, maintenance, and regeneration (natural regeneration can be part of forest plantings per Verification protocol).

How many states report these practices?

As of 2021 progress:

- VA: 221,745 feet
- PA: 4800 feet
- MD: 34, 177 feet

Acronym List

BMPVAHAT: Best Management Practice Verification Ad-Hoc Action Team

06/06/2023

FWG: Forestry Workgroup

RI: Resource Improvement

NEIEN: National Environmental Information Exchange Network

NRCS: Natural Resource Conservation Service

WQGIT: Water Quality Goal Implementation Team

EPA: Environmental Protection Agency

AgWG: Agriculture Workgroup