

Overarching Comments Regarding Forestry Sector Verification

Comments on Protocols Themselves

Some states placed the forestry practices in the Ag section of their BMP protocol. This is not ideal because forestry practices have distinct partners, lifespan, needs, tracking mechanisms, etc. This is especially true for agricultural RFB because of the great reliance on this practice to meet WQ goals, but some states are also relying on urban RFB, timber harvesting BMPs and urban tree canopy. States should revise their Protocols to make distinct the forestry BMPs. Some forest practices are not high priority. In this case, states should provide a schedule for when those verification protocols will be completed.

Forestry Practices and Verification Guidance

There can be many hurdles to getting new Riparian Forest Buffers functioning on the ground. Multiple state-federal-NGO organizations are involved in outreach, technical assistance and record-keeping in each state. Increased coordination among partners is a big issue cited in the new Riparian Forest Buffer Management Strategy. It is not clear even to the RFB partners what contracted sites are being inspected by who and when. Even the procedure will change from year-to-year based on budgets.

Initial inspections of RFB are usually visual field inspections completed by agency personnel [usually a forestry partner, NRCS or SWCD] since they are needed in the planting/conservation plan necessary for all cost-shared tree planting. Landowners are given the option of self-reporting (Note: It is not uncommon for a landowner to self-report after a planting has occurred as it is in his/her interest to get paid for the work.) Because of this self-reporting, FWG guidelines stipulate a follow-up visit by inspection professional during the establishment period (years 1-4 post-planting). Issues with survival (insect infestation, invasives, flooding, herbivory) can happen at any time in the life of the practice, but most occur during the establishment period.

One measure of confusion surrounds spot checks. It is unclear whether the variously mentioned FSA and NRCS inspections are additive or the same. FSA often provides funding to NRCS or State Forestry to do this type of field work. For instance, if FSA conducts a 5% spot check and NRCS conducts 10%, this may mean 15% are spot-checked, but more likely it is 5 or 10%. Likewise if a state's criteria is to have 25% spot-checked, that amount may include what is being spot-checked by federal agencies.

There is required maintenance, often performed by the landowner. The landowner may receive \$5/acre/year to do maintenance, but this is less than what it costs and it is common that the maintenance is not performed. In some cases, no tree shelter is used to protect the trees or the stake in a tree shelter breaks, making herbivory a problem. With properly installed shelters, mortality is only 10 to 30% (compared to 70% without shelters). Sometimes inferior seedlings or the wrong tree species for the site are planted. Information from VA's Hardwood monitoring regime has provided excellent information on this, and the monitoring regime is needed more

than ever when considering a changing climate. More states should adopt monitoring regimes like VA's.

Tree survival is only one indication of RFB function. Issues with concentrated flow (vs. the uniform flow needed for a buffer to function) may develop but information on this has never been routinely collected and I know of no studies that gathered the information on likelihood of occurrence. Logically, concentrated flow is more likely to happen on steeper grounds.

The FWG's guidance calls for 100% inspection at planting or prior to; a second inspection during the period a buffer is becoming established to assure that any maintenance problems are detected and corrected, and risks identified; inspections during years 5-10 based on a risk-based statistical sampling with 80% confidence; and 100% inspection near the end of contract to encourage/facilitate buffer re-enrollment or retention.

Some of these issues with verification can and should be addressed as part of the partners' two-year workplan that accompanies the Management Strategies for RFB and Tree Canopy.

Forest Conservation. There is a lot of confusion around this practice. Because it is defined for MD only by virtue of their Forest Conservation Act, the FWG did not treat it in their Verification Guidance. Some states may interpret this as forests that are protected in their state-- this is not accurate. It can be characterized as forested acres not developed, because annually a certain number of acres are assumed to be developed in the CB Model based on an algorithm. As the Model changes, this practice is likely to change too.