Forestry BMP Verification –Principals and Sample Protocols (in subtext)

Discussion Draft for Forestry Workgroup 3/6/2012

Why Verification: Given the ever increasing importance that accounting for BMPs is taking on within the partnership—Bay TMDL reasonable assurance, two-year milestones, offsets, tradable credits, etc. —Chesapeake Bay partners need to have assurance that the practices reported are sound, or verifiable.

Verification Framework:

* Partnership agreement on a set of **verification principles** to guide the jurisdictions’ development of verification programs
* Partnership agreement on overall set of source sector-specific **verification protocols**. These protocols would be developed by the sector workgroups (e.g., Forestry Workgroup), approved by the Partnership, and used (tailored as needed) by the jurisdictions.
* Establishment of a **Verification Panel** charged by the Partnership to review and make recommendations back to the Partnership

Note: Jurisdictions will draw up their own Verification Program based on this framework.

***Urban RFB and Tree Planting BMP Principles***

1. Ensure tree planting acreage represents a ***net gain*** in overall tree cover
   1. Jurisdictions with an urban forestry partner/staff trusted by state forestry agency—who also likely: have a UTC assessment, goal, and implementation plan, plant 1-2” caliper trees to improve chances of survival, have ordinances that protect urban trees, and conduct survival/health monitoring of plantings— could receive ***full credit*** (100%) for this practice as reported. Baseline survey and an established program are both needed to assure a net gain.
      1. Jurisdictions without a trusted urban forestry partner/staff reporting could be discounted 30%**??** for uncertainty of survival/net gain in tree cover
      2. An additional discount (60% **??**) is applied if a proxy for trees “trees sold” or simply a website submission is used and trees were not viewed by a professional
   2. Maintain detailed record-keeping on tree planting at local level, but simplify and standardize information for reporting up to state-> NEIEN
   3. Avoid double-counting and avoid counting tree planting for mitigation
      1. Does tree planting under MD’s FSA warrant an exception?
      2. Tree plantings that do not survive will be replaced within a year **or** reported as such through the local🡪state record keeping.
      3. Something to keep in mind-- urban tree planting is still largely undercounted. With the verification process is an opportunity to educate about tree planting and improve tracking and reporting from local governments/watershed groups up through state, as these verification principles are implemented.
   4. States will verify the urban tree planting practice by sampling 10% of reporting jurisdictions after 2-5 years, using high-resolution imagery tools or an equivalent measure. These will generally be in the 1a category above, or jurisdictions reporting substantial tree planting.

***Agricultural Riparian Forest Buffer Tree Planting BMP Principles***

1. Avoid double-counting
   1. State forestry agency reviews cost-share project data from USDA/USGS prior to NEIEN input
   2. Work to establish a unique identifier for each project to avoid duplicate records
2. Report length and/or width of project (not just acres)- this is important to more accurately capture the WQ effectiveness. Narrower buffers (>35’ and <100’) will eventually be discounted)

--Could NRCS/FSA begin tracking buffer length or width not just acres?

1. Ensure projects are properly installed and maintained

--10% of new, non-cost share RFB installations should be monitored (in keeping with USDA cost-share practice)

1. Remove practice from database/model if it is no longer there

--Sample forest buffer at 15 yo to verify establishment

1. Need to differentiate re-enrolled CREP acres
2. Practice needs to represent a ***net gain*** in acres to count
   1. RFB baseline for a state should be ascertained using high resolution imagery and the Land Image Analyst or other tool. Re-sample every 5-6 years to verify net gain.

***Forest Harvesting BMP Principle***

1. Forest harvest BMP rate of implementation needs to be determined every 5 years by state (e.g., sampling or survey)
   1. Could have field checklist of how practice was implemented, verified
   2. Focus on forest harvesting BMPs that are most important to water quality?
   3. States that don’t know rate of private land harvest should be discounted…
   4. If states have information on forest harvesting, they can submit acres and override the 1% harvest rate assumption
   5. States with regulations and monitoring programs in place could use that info in lieu of forest harvest BMP implementation sampling
   6. Adaptive management –BMP monitoring to determine if a practice worked (should this be incorporated into verification?)