

Timber Harvest Task Force 11/1 Meeting

Ben Livelsberger, PA BOF

Peter Claggett, USGS

Lorenzo Cinalli USFS

Helen Golimowski, Devereux Consulting

Rob Feldt, MD

Chris Miller, DE

Jeremy McGill, WV DOF

Anne Hairston-Strang, MD DNR

Caitlin Verdu, VA DOF

Sarah McDonald, USGS

Dave Montali, VA DOF

Katie Brownson, USFS

Cassie Davis, NYDEC

Topics of meeting:

The default rate for harvested forest in CAST

Forest harvest and riparian area

Notes:

The default rate for harvested forest in CAST

Harvested forest refers to forests with some amount of harvest within a year. This is not broken down by type of harvest (selective cut, clear cut, etc.) Currently, the default rate in CAST is 1.5%. This default rate applies to states that do not report harvesting, and for those states it is assumed that they are cutting 1.5% of their forest. Question for the group: What % of forest should be the default rate? What number is most accurate?

It should be noted that improved reporting is better than an assumption of a default rate. But if we have to have a default rate, what would be the appropriate number?

Katie showed the timber harvest data from both CAST and the land use data. The task force saw that LULC numbers are smaller due to the data not mapping thinning. The CAST numbers also take into account of permitted acres, not acres of harvest. For some states, CAST also uses the default rate of 1.5% which means that it thinks more trees are coming down than truly are.

FIA data was talked about, it was noted that they only sample a subset of plots annually. We also know that FIA data has some limitations as it doesn't have very many sampling plots in some states. Using two different methods to evaluate how much forest is harvested annually, FIA data suggests that the actual rate for the watershed is probably closer to 1.1%

Right off the bat, the task force agreed that 1.5% is too high. MD noted that just because a forest is permitted to be cut does not mean that they do get cut. A default rate of 1% makes the most sense.

Dave from WV stated that it used to be 1% and asked if we knew why it increased to 1.5%.

Peter brought up how there is a huge difference between clear-cut and selective cuts and how they show up in the LULC data. It is hard to get around to the fact that they are treated the same in CAST.

Anne spoke up and said that road systems and skid trails are the biggest issue when it comes to sediment. Clear cuts should have BMPs in place that limit their impact on water quality.

Katie asked if we should be distinguishing between the types of harvest in reporting and in water quality modeling. Anne noted again that clear cuts should have BMPs, so you are not going to see signals of change in water quality. As long as harvesting practices limit soil disturbance, they shouldn't have much of a water quality impact. The major issue of timber harvest on hydrology is reducing water uptake by trees in the short term. She also noted that sometimes more intensively managed harvests are actually better for encouraging regeneration. In hardwoods, a lot of regeneration is happening through seed stocks and stump sprouts.

Jeremy also noted that clear-cuts take a long time. Those trees take upwards of a year to come down. He agreed that road systems have the biggest impact on sediment loads. The loss of canopy cover doesn't reduce the impact of rainfall on erosion by that much. He estimated that 5-10% of a harvest area would be more heavily impacted by harvest.

Dave Montali suggested changing how we model the impacts of harvest in CAST so a much smaller area is being affected by higher loads (landing areas and roads) rather than the entire harvest area.

Peter mentioned that originally harvest areas were supposed to load more heavily for the first year and then over a three year period, gradually return to loading like true forest but this didn't happen. Now after that first year, the harvested area goes back to loading like a forest.

Action item: The group should revisit timber harvest loading rates in CAST and consider whether we should recommend modifying how timber harvests load in CAST for Phase 7.

Decision: The group agreed that the default rate should be reduced to 1.1% to align with the FIA data.

Action item: Katie and Sarah will pursue the necessary approvals to get this recommendation implemented. They will also look into how and why the default rate got increased to 1.5%.

Forest harvest and riparian area

Sarah presented the new land use data for forest change within the riparian corridor. She found that they are seeing some riparian forest change associated with forest harvesting. The question for the group is how do we account for forest harvest activities when we look at riparian forest change and what protections are in place to ensure there is minimal disturbance to forest cover in the riparian area associated with harvest.

Anne noted that we need ground truthing to ensure that we are IDing perennial streams in the stream network and that we are actually seeing harvesting. If these are just channels or intermittent/ephemeral streams, it might not be something to buffer during harvests.

Action item: Identify opportunities to ground truth the 1:24k stream layer and see what some of these streams look like on the ground.