Presentation to SAB Panel on Biogenic Carbon

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We would like to highlight

- A few words about baselines
- NCASI's examination of the SAB $BAF_{\sum t}$ approach as applied to
  - Idealized roundwood-based systems
  - Residual-based systems involving methane (e.g. woody mill residuals used for energy instead of being disposed in landfills)
- Much more in NCASI's written comments

Forest carbon projections for anticipated future baselines

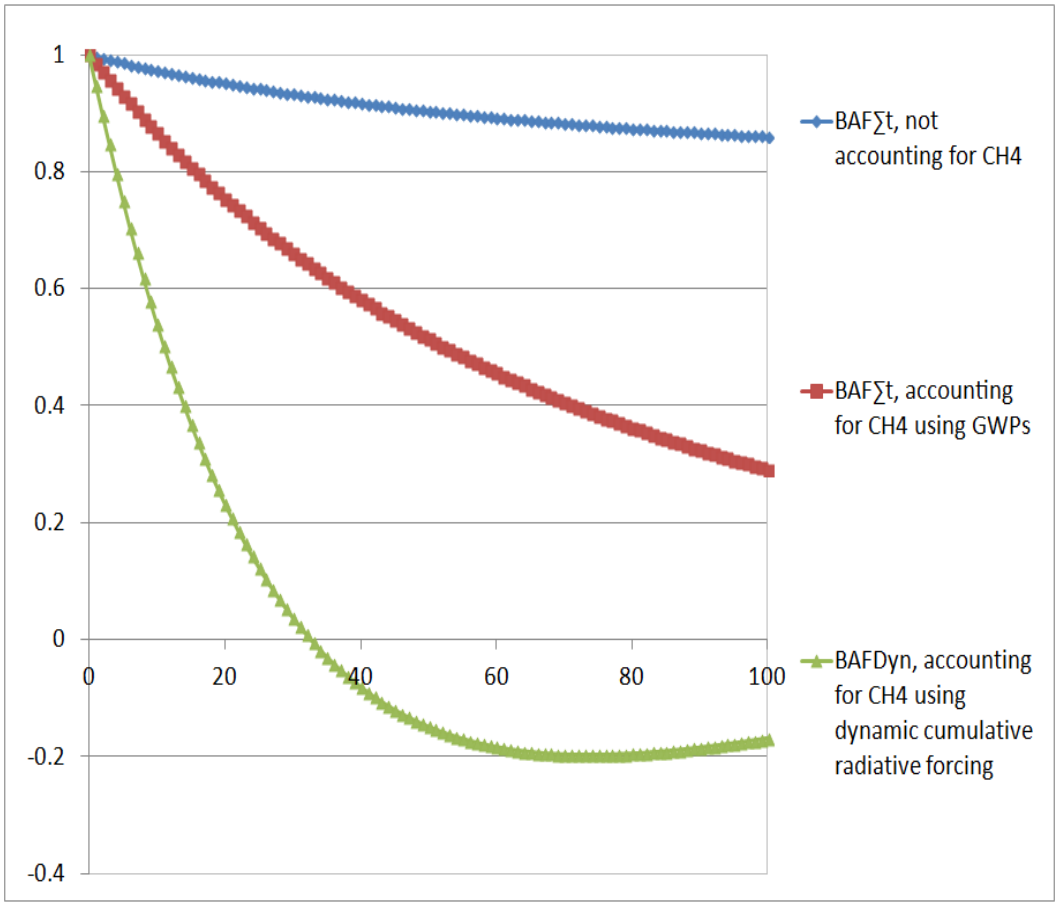
- FASOM, the SRTS Model, the RPA Assessment Models, etc. yield important insights into the factors affecting forest carbon stocks when demand for forest-derived biomass increases
- Question: Are there ways to incorporate these insights into a policy framework that, in the face of uncertainty, is more robust than the modeling <u>yet achieves the desired outcome</u>?
  - And, is as <u>simple</u>, <u>predictable</u> and <u>low-cost</u> as possible to implement
  - Might there be a way to accomplish this using reference point baselines?
  - We suggest that policy makers should be open to using the science in the best way possible as they develop regulations, all things considered.

SAB $BAF_{\sum t}$ approach – roundwood (based on anticipated-future-baseline)

- Given accurate input information (i.e. accurate projections of future carbon stocks in the reference and policy scenarios)…
  - The SAB $BAF_{\sum t}$ approach yielded reasonable estimates of net radiative forcing impacts for the idealized roundwood-based systems we examined
  - We have not, however, considered how the approach would work in more complex situations involving, for instance, thinnings and different starting age class distributions, etc.
  - We suggest that additional work is warranted to examine the approach in a range of real-world circumstances

SAB $BAF_{\sum t}$ approach – woody mill residuals

- Where there are differences in methane between reference and policy scenarios, the $BAF_{\sum t}$ approach is not appropriate
- It is important to account for methane emissions and to use a method that accounts for its short lifetime in the atmosphere (e.g. dynamic modeling of radiative forcing)



In summary

- We would suggest that while anticipated-future-baselines are needed to yield scenario-based insights, it is too early to dismiss the idea of accomplishing EPA's objectives within a regulatory framework based on reference point baselines.
- Within an anticipate-future-baseline approach, the SAB $BAF_{\sum t}$ approach yielded reasonable estimates of net radiative forcing impacts for the idealized roundwood-based systems NCASI examined. Additional examination is warranted, however, under a range of real-world conditions.
- The $BAF_{\sum t}$ approach is clearly not appropriate for systems involving short-lived GHGs with high radiative forcing, such as methane. If the reference scenario methane emissions are significantly larger than the policy scenario, the $BAF_{\sum t}$ approach yields BAFs that are far too large. The method used to account for methane should reflect its short lifetime in the atmosphere.