

On May 10, 2009, at 1:27 PM, Powers, Wendy wrote:

Drs. Galloway and Shaw,

I'm not certain if the INC is accepting comments on the draft report posted in February. Regardless, I have read the report and applaud the committee's efforts. I have drafted some comments and attached those comments for consideration by the committee. Thank you for considering.

Regards,
Wendy

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Overarching comments:

The background material presented is very well put together. The team provides an excellent accounting of N_R sources to the environment. The scientists then go on to provide what is an interesting and thoughtful discussion on ecosystem services.

What concerns me is that the recommendations do not consider the ecosystem services derived from the various sources of N_R . Programs are available to do so. But instead of taking this step, the authors have singled out 1 source of emissions as the only quantitative recommendation (ammonia emissions from livestock) when, in fact by their own accounting, it is not the overwhelming source of N_R into the environment. Nor is the target sufficient to attain the overarching goal of a 25% reduction in N_R load.

It would be prudent for the authors to make their recommendations based on an ecosystem service analyses and set targeted reductions for all of the identified sources based on the services derived from the source.

I was disappointed to see that while outreach was discussed early on in the document, outreach was not incorporated into any recommendation. EPA has a unique opportunity to reach audiences that traditional Extension Services do not successfully impact. One such audience would be homeowners using fertilizers on lawns.

One finding is completely out of place (#5). It is neither supported by the information (finding) that precedes it nor does it fit with the background information provided. I suspect it is an editing error; it is part of another report and somehow made its way to this one.

Specific comments.

- P. 7, L13 removed determined
- No finding or recommendation related to non-ag use of fertilizers. Could at least relate this back to education/outreach efforts via EPA.
- P. 8, L 2 – 4 major actions
- Risks/tradeoffs of enhancing denitrification? How much emphasis should be placed on using this as a strategy?
- P. 20, L 20 – 3 or 4 overarching recommendations (A, B, C, where's D)?
- Fig 3 – need to identify magnitude of each process
- P. 21, L 19 – inconsistent with eutrophication concept
- Outreach program to address non-ag N use seems to have been lost despite limited ecosystem services returned
- 2006 data for NFUE likely not reflective of current practices given prices
- P. 40 – doubt recommendations are 20-25 yr old in major crop states, permit or other requirements likely require yields based on county stats or documented 3-yr average as opposed to an optimistic approach.
- Volatilization from synthetic fertilizer is half that from manure????????????? How does that happen?
- In general, the approach seems to be to make a dramatic sound bite-type statement then tone it down in the following text by bringing in facts to balance. Suspect much of the report will have boldface quotes of some of these statements.
- Impact education efforts/prices have had on fertilizer use in last few years seems to be underestimated.
- Finding 5 – completely unsupported by text that precedes it. Not necessarily a poor finding/recommendation, but doesn't fit here.
- A finding should follow Table 9.
- Table 10 – error associated with estimates? Impact of greater reduced N?
- Good to know that a reasonable estimate can have +/- 50% accuracy
- P.69, L16 – 'close to implied' = actually different by 20%
- Recommendation 7c – absolutely no text in document to support the recommendation
- Table 14 – vegetated sources are a greater source of losses
- Table 15 – repeated typos
- R11 – which agencies have funding for this?
- Table 17 – unclear
- P.117, L12 – discourages?? How so?
- No indication how effective NEC has been

- P. 143 – last paragraph takes a whole page to get to the point that animals are more efficient than fruits, vegetables – another sound bite?
- R24 – interesting that this is the only recommendation with a recommended reduction target when the data throughout do not support that this is the overwhelming means of controlling Nr
- Summary – 25% if all recommendations are adopted? How possible when only 1 has a real target proposed?