

Reviewer's report

Title: Water quality monitoring records for estimating tap water arsenic and nitrate: a validation study

Version: 2 Date: 23 December 2009

Reviewer: Jim VanDerslice

Reviewer's report:

Overall the Authors have carefully addressed the issues. I have only a few remaining comments.

Major Compulsory Revisions: None

Minor Essential Revisions:

Group A and B water systems: This designation needs to be described (p 7) as other states do not use this terminology. The footnote of Table 1 needs to clarify whether Group B systems are included in the 'Private wells' or the 'Public system' category. If the Group B are in the Public system category, then the footnote for all three tables need to be revised to 'state or federally mandated monitoring' as the monitoring of Group B systems is not federally mandated.

p 9, Results, 1st paragraph: 2nd sentence needs to be edited. 3rd sentence is unclear to me.

Discussion: I think it would be important to note somewhere that few states regulate or require monitoring of systems that aren't regulated under the SDWA, so that the amount of data available would be less, and that only a handful of states have electronic (GIS) data on water system service area boundaries, so that this analysis is perhaps a best case scenario.

Discretionary revisions:

p 10, 2nd paragraph: Is there a better word than 'municipality'? This isn't a type of water system. Perhaps, 'water system owned by a municipality.' Yes, that is longer....

p 10. Last paragraph: 'agreement was acceptable.' Perhaps use 'moderate' as is used elsewhere. Acceptable implies some criterion.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.