

Science Integration for Decision Making at the U.S. Environmental Protection Agency

General Comments

- The report is well written and at a length and level of detail that should be very useful for agency managers and their staff.
- There are a couple of findings that are buried in the text that I think should be brought out and highlighted.
 1. Line 14-16 on page 3 indicates that the interviews revealed that “agency staff and managers view science as an important part of decision making”. I think this should be highlighted as the first finding. This could easily be accommodated by moving the Heading “*Science Integration practices vary across the agency*” the start of line 24 on page 3. The line 14 could start with heading “***Science viewed as an important component of decision-making***” followed by the text in lines 14-22
 2. Lines 42-43 on page 6 have a second key finding that is buried a bit in the text. The text states that “***Time and resources are barriers to science integration across the EPA***” this seems to be a major finding and not parallel to the finding of *Some EPA leaders and managers actively promote science integration*. The text that follows doesn't easily support this new finding so would need to add some different text if possible. I think this is a stronger finding and should be developed.
- The order of the findings could be stronger. They don't seem to have a hierarchy. For example the finding on Line 1-40 on page 6 “*Scientific assessment is a critical function.....*” seems line it should be number 2 behind “*Science viewed as an important component of decision-making*”.
- If I were going to reorder the findings to create a hierarchy I would order them as follows:
 1. ***Science viewed as an important component of decision-making*** (currently lines 14-22 on page 3) This is a new finding header recommended above.
 2. ***Scientific assessment is a critical function at the EPA because EPA is both a science and regulatory agency*** (currently lines 1-40 on page 6)
 3. ***No EPA program has fully implemented the science integration framework recommended by the SAB in 2000.*** (currently Lines 12-25 on Page 4)
 4. ***Science integration practices vary across the agency*** (currently lines 23-34 on page 3 and lines 1-10 on page 4)
 5. ***Some EPA leaders and managers actively promote science Integration*** (currently lines 42-44 on page 6 and lines 1-20 on page 7)
 6. ***The Agency's focus on program and disciplinary “silos” remains a significant barrier to science Integration*** (currently lines 8-18 on page 5)
 7. ***The EPA needs Science leadership Beyond ORD*** (currently lines 22-39 on page 7)

- Others may want to reorganize the findings differently but my point is current sequence doesn't seem to have any intentional order.
- Recommendation section seems to be missing a key tactical recommendation to improve integration of science into EPA assessment processes and decisions and that is to **make it a performance criteria.**
 - If managers and staff had science integration as a performance objective in their formal annual review then they would be looking for opportunities to highlight when science was integrated and made a difference.
 - If project success and performance criteria included an assessment of using the best science as part of the project then it would get discussed in the planning stage and be part of the consideration in any project decision-making.
 - The more the utility and barriers to utility of science gets vetted in routine processes the more science will get considered as a valuable component of decisions.

Detailed Edits

Line 26 page 1 - Add “ ... **and supports the selection of corrective actions**” after the word “questions”

Line 1-3 on page 3 - The sentence gives a sense of the # of staff working. It should be supported by a following sentence that is just as impressive on the number of tasks performed. For **example “ These staff provide the scientific and technical input for assessments and decisions related to _X_ permits, __X_ New product reviews, _X__ remedial actions, etc.”**

Line 14 page 5 . Add “... **and development of creative cross-media solutions.**” After the word “world”

Appendix C - line 33-35 on page C1 . **Recommendation #9 is lost in list it should be Number 1 or 2.** Some one may want to go through these recommendations and organize by their priority.