

SUSTAINABLE & HEALTHY COMMUNITIES

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QUESTION 2a

How well will the research directions in the SHC Early Draft StRAP (2016-2019) support EPA in achieving the relevant Agency objectives and cross-cutting strategies, as described in the EPA Strategic Plan (2014 -201 8)?

Question 2a

- The SHC StRAP did a good job of proving a research agenda around decision support.
 - This, in turn, will be helpful in terms of the EPA meeting its strategic goals (e.g., around being a high-performing agency).
- However, it's worth noting that developing and testing decision support tools will be challenging; a critique of the StRAP in this regard may be that it made decision support tools seem a little too easy, straightforward.
 - Though there was acknowledgement that agreement on a accessible process for defensible decision making could have positive ripple effects outside of SHC.

Question 2a

- Work in SHC could have positive spinoffs for the other ORD research programs, and the agency's strategic goals because of the input that will be gleaned from stakeholders that are engaged in SHC activities
- However, the SHC StRAP might be made even stronger by acknowledging the hard work that will be required to not only build, *but* maintain productive partnerships with communities.
 - Especially the case when we think about marginalized communities (EJ).

Question 2a

- Just like questions about how to characterize and quantify ‘sustainability’, there’s value in asking ORD to looking at existing research (and literature) on stakeholders and stakeholder engagement.
 - In terms of EJ, it’s critical that marginalized stakeholders be involved meaningfully in questions around the development of decision-support tools.
- And, the breakout group encourages ORD to conduct evaluation/ground-truthing of the decision support tools it’s developing.
 - There’s an opportunity for ORD to learn over time since there will inevitably be an experiential component to tool development and rollout.
 - Adaptive management

QUESTION 2b

What are the SAB/BOSC perspectives on the proposed research directions in the SHC StRAP providing research to address environmental issues of 2020 and beyond?

Question 2b

- The breakout group felt it would be useful if the StRAP contained a short section about EPA/ORD forecasts for 2020 (even if it's a rough forecast), and then an explicit discussion about how research around SHC might address them.
 - ‘Known unknowns’

Question 2b

- Some effort in SHC might be devoted to monitoring issues that may appear to be ‘outliers’ at the ‘fringe’, which because of cumulative effects, might end up being problems post-2020.
- Also, monitor how changes in one area (e.g., energy development) might shape future stressors on sustainability, well-being (e.g., pipeline-related risks).
- Work in SHC might also be devoted to monitoring changing demographics, with an eye toward how these might alter sustainability metrics, as well as objectives and tradeoffs that might guide decisions.
- Work in SHC should also be especially sensitive to what’s happening in vulnerable communities.

QUESTION 2c

For SHC, do the presentation and plan indicate that ORD is designing for integration, where appropriate, on topics that are relevant to other research programs?

Question 2c

- By and large, yes...
 - ...but, the devil is in the details.
- The various topics seems to hang together at the conceptual level.
- However, some concern was expressed about whether the six research themes, which are meant to be integrative, will deteriorate into six silos.
 - E.g., the SHC slide set represents sustainability in terms of nested, overlapping dimensions. However, elsewhere, sustainability is treated as individual pillars. In sustainability science these days, most representations have shifted toward the former vs. the latter.
 - Whether or not integration really happens will be a function of how well the agency can build *transdisciplinary* capacity.
- Going forward, there's a need for leadership in terms of the different themes talking to, and learning from, each other.

QUESTION 4a

Does the SHC research program contain the elements necessary to integrate the two critical elements – ecological and human health – of EPA's mission?

Question 4a

- Yes, but...
- The StRAP needs to include more clarity on the extent to which human health and ecological risk are addressed as coupled/integrated systems, or separately in terms of a stressor-response paradigm.
- At the moment, individual research projects seem to focus on individual elements of the system, and not so much the holistic coupling.
- There's a need to begin to shift research in the direction in the area of systems-based work.
 - Transdisciplinarily, systems-thinking makes the coupling more explicit.

Question 4a

- There's much more to human 'well-being' than human health. The StRAP might be clearer in terms of accounting for these other determinants of 'well-being'.
- ORD might consider parallel research programs under SHC; one that focuses on DM processes (e.g., SDM, LCA), and another that focuses on attributes and measures linked to the values and objectives that are the primer for these decisions.

QUESTION 4b

Is increased well-being the appropriate outcome to aim for (vs. the amelioration of specific health conditions)? If so, does the SAB/BOSC have recommendations for shaping the Community Public Health research project more toward broader well-being impacts?

Question 4b

- Yes, but...
- What does ORD mean by well-being?
 - Well being is linked to many different dimensions: environment, human health, psychological (EJ). Economic, which will interact.
 - Definitions of well-being will differ *within* communities/contexts and *between* communities/contexts
 - The definition of well-being will also be dependent on who the decision maker(s) is(are).
 - There will need to be different levels of resolution; generalized metrics as well as more highly specific, contextual metrics.

QUESTION 4c

SHC is interested in thoughts and suggestions from the SAB/BOSC on ways to conduct research on the science of sustainability.

Question 4c

- Okay, but...
 - The sustainability of what?
 - The natural environment, natural resources, well-being
 - ‘Sustainability’ is a function of the tradeoffs between environmental protection (of the natural environment), as well socially-defined objectives (society, economy).
- There’s been a lot of great research by a lot of great researchers out there on ‘ways to conduct research’ on sustainability.
 - Uncertainty, resilience, vulnerability, optimization, etc.

Question 4c

- A common refrain is to build ‘social science’ capacity within ORD, EPA.
- In our discussion, the emphasis was more on building transdisciplinary capacity so as to be more integrative in research approaches, as well as in support of decision-making.