February 22, 2021 Social Science Working Group Call

Attendees: Jaime Ashander, Güray Hatipoğlu, Whitney Woelmer, Jody Peters, Melissa Kenney Regrets: Cindy Hu, Mike Dietze, Kira Sullivan-Wiley

Agenda/Notes:

- 1. Reminder: EFI Steering Committee elections are coming up. Send nominations. To vote, make sure to sign up for membership/renewal
- 2. Plans Moving Forward What Do We Want to Focus On?
 - Topic that came up previously: Compiling examples of best practices for communicating uncertainty in forecasts. Is this something we want to tackle?
 What are the concrete steps?
 - Jaime had worked on vignette for code-based example for using the RCN Challenge submissions. This goes along the idea of best practices of communicating uncertainty forecasts
 - Whitney has been working on developing an undergrad module for <u>Macrosystems EDDIE</u> on visualizing forecasting uncertainty for decision making. This is something she is interested in working on this and crowd sourcing it to get input from others.
 - The module is a Shiny App that the students interface with.
 - Want it to be relevant outside of forecasting. So big focus is visualization literacy. Then tie in the decision making component.
 - Interact about best practices then produce something related to it and then it is used in Macrosystems EDDIE? Or what would be the end points that would be useful? Could flag this for a future call to get everyone interested in this to provide input
 - The module would be used to have available for any instructors to use in undergrad classes
 - With developing a <u>Task View</u> on these best practices, could collaborate widely. Then foundational information could be incorporated into the module.
 - Useful to have general discussion about best practices and how to follow rules. According to Whitney's experiences looking is that there isn't any best practices.
 - Have menu of options to about with stakeholders
 - Melissa shared in August about visualization best practices: https://www.umdindicators.org/?page_id=1028
 - Move away from best practices term to here are ways to make visualization of forecasts
 - Melissa and Mike had worked on how to represent geospatial uncertainty for a phenomenon that everyone is familiar with, but the output is not as intuitive. USGS WaterWatch, US Climate Assessment
 - Do a presentation that combines lessons learned later this spring

- Big unknown and huge area of research opportunity is user control graphics.
- Melissa and Mike work with static graphics, but not the user control graphics (ShinyApp, GIS-based - one where you tell the system where you want to see). There are some overlaps between the two types of graphics, but there are some differences that need research to be done
- The way to approach this is through co-production you can accelerate the pipeline from research to operations.
- Best practices of visualization and support science.
- Visualization piece is more nuts and bolts on how forecasters can do better than their intuition
- Federal partners mandate is to provide outputs to the general public (huge audience). Need the products to be useful even if you don't know how they are being used. First step to usable is to have products that are understandable broadly. So partners could make decisions that are broadly accessible.
- Key point from USGS Water Watch research preference does not correspond to understandability. More people like the rainbow colors, but do not understand it as well.
- Melissa / Mike presentation
 - If timing works (end of May?): Added segment from Whitney Macrosystems EDDIE - get feedback from broader EFI community in May
- Melissa actively searching for opportunities to test the visualization
- When CI/Methods is ready to talk about Task View 4 on visualzation
- 3. Panel or Presentation on Actionable Science/Co-production follow up from discussion with joint Partners/Social Science call
 - Melissa Kenney and Mike Gerst
 - Chris Brown or someone from NOAA
 - Cindy Hu or someone from Mathematica
 - Suggestion from Cliff 2-9-21: I would like to suggest inviting Mahmud Farooque, Associate Director of Arizona State University's Consortium for Science, Policy, and Outcomes (CSPO) to join the spring panel. Mahmud was a consultant on the DOI report and has done a great deal of work at the intersection of science and decision making.
 - Other folks in the group may be familiar with CSPO's work, or its director Dan Sarewitz. They are based here in DC and I've participated in a number of their programs.
 - Have 2 separate presentations
 - Have Melissa/Mike present their findings on visualizations
 - Have panel on co-production

- 4. Blog Post Updates
 - Mike Gerst no recent updates
 - Jaime will look into emails and follow up
 - o Jaime in hiatus
 - Jaime will look into emails and follow up
 - Güray Jaime, Kira and Güray had checked in. Quantitative analysis looked interested, but no progress on that. How reliable are the quantitative NLP tools when working with different languages. If European body is doing the writing in English, how comparable is that corpus to British English or American English. So may need to be careful, but not sure.
 - Background: To what extent is the notion of eco forecasting included in regulations at the globe scale.
 - Could have a short blog post and use current analysis vs trying to go more in-depth.
 - Found frequency of occurrence of ecological forecasting in regulations. Then wanted to go further to see what was using the term vs what was actually using the forecasting.
 - Jaime and Güray to follow up and think about how best to move forward with the post
- Our next Joint Call is not until June, but leaving this link here in case ideas come up. Google doc with Joint Call Ideas