

## July 16, 2019 Partners & Knowledge Transfer Working Group Call

### Agenda

- Introductions / record attendance
- What are the short term goals for this working group -- what could be accomplished (or balls that could get rolling) this year and how do we get there?
- What are the longer term goals we are working toward
- Are there goals where a small amount of seed funding from EFI (<\$5K) would help move us forward
- Leave with a plan for a next call (either exact date or data range to poll) and hopefully some discrete, assigned next steps.
- Links to EFI2019 Conference Notes
  - First Breakout Notes [LINK REMOVED]
  - Second Breakout Notes - group merged with Decision Science to come up with these notes: [LINK REMOVED]
  - Wednesday Breakout Notes: [LINK REMOVED]

### Notes From the July 16 2019 Call

#### Overview of Agenda - Mike

#### Announcement - Mike

Ecological Forecasting RCN has been funded; Quinn Thomas, Virginia Tech, is lead PI; this will enable ongoing conversation of EFI, and continued development of the activities of EFI.

#### Introductions/Attendance - Round-robin

Jake Weltzin - Ecologist, USGS. Working to improve capacity for USGS forecasting. His goals are to hear stakeholders needs and find ways to get what they need and finding ways to validate products.

Melissa Kenney - Institute on Environment at U of MN - recently moved here. Previous worked with NOAA et al on decision making

Kathy Gerst - University of Arizona, USA National Phenology Network. Coordinates data product and connecting with user groups. Sees overlap with this group and Decision group - interested in how we distinguish goals of those two efforts.

Chris Brown - NOAA. 20 years of forecasting experience, starting with sea nettles. Interested in helping moving products into operations. Research is very different from operations!

Mike Dietze - BU. Runs ecological forecasting lab

Jody - Notre Dame. Help Mike with EFI logistics

Kira Sullivan Wiley - Postdoc at Pardee at BU. Background in ecology. But mostly work in behavioral geography. Work with organizations that influence human behaviors. How to operationalize best practices between organizations and decision makers.

David Klings; Smithsonian; coastal carbon network. Looking to accelerate wetland carbon decision making. Web interfaces / accessibility. At may meeting, stakeholder engagement came up a lot. Trying to build ontologies for research applications and land management

## GOALS

Jake/Melissa: Summary from May EFI2019 meeting

- Moving fx from research to operation/application. This is something this group can work to define better and help organizations on research/operation end - how can we justify our actions and maximize our role in development/application of ecological fx.
- RTO - research to operation
- Different organizations have different mandates. E.g., USGS doesn't have mandate to operational forecast even though they do have these types of forecasts (earthquakes, etc). But NOAA does have an operational roadmap which may be too ambitious according to Steve Thur, NOAA.
- Think about workflows across the spectrum of big data. Need a variety of partners to maintain forecast system
- Who are the big players and what are their roles? Some examples below, but who are all the others, what are their needs/roles? Could we develop a typology?
  - NEON - collect data. Don't have many level 4 data products. Aspire to create forecasts, but aren't doing so yet
  - TERN - Australian equivalent of NEON. Collect data
  - Smithsonian
  - The Nature Conservancy
  - A project might be to Identify audiences and stakeholder groups. Then how to transfer information/create 2-way communication.
- Federal organizations have regulations where forecasts will be useful. Understand how the forecasts can be structured. How can forecast output be most useful to help with these regulations.
- Going beyond research to operations. NOAA has R2X - which goes from research to operations to applications and to the commercial sector (which our group may or may not get involved). If private sector takes over forecasts then would be good to coordinate with.
- With the private sector will want to think about CI, ownership, commercialization, intellectual property...

- Partnership management - who has responsibility. Within EFI what structures are available to help finding partners, making contact. The administration side of things is also something to think about as well as the science side of things.
- Boundary organization - don't want every individual ecologist to have to try to find a way to interact with partners.
- Kathy - NPN developing/managing partnerships. It's hard. Had to flip the switch. Not going to partners saying "this is what we do what can we give you". Instead doing more listening and trying to identify equal participation. Cultivating partnership so all groups feel invested. Worthwhile pursuit for this group to explore and lay groundwork for EFI.
- Go to where stakeholders are and hold small working groups to learn what is needed.
- **NPN working on a summary (lessons learned) document!**
- David - who take responsibility often falls between the cracks because rarely is there dedicated personnel to do this type of engagement. Will report back after taking to Megan and NC State (individual who is dedicated person to stakeholder management/making connections). Having the human capital to engage with stakeholders is important.
- How to manage data and deliver data - web design/aesthetics is also important for stakeholder engagement.
- Jake/Kathy: NPN has a "data products working group," and an "inform decisions working group," the latter of which engages and listens to stakeholders, helps them define their needs, establishes requirements, and then engages with the DPWG to start to build products.
  
- What are the things we might want to tackle on different timescales?
  - Kira: plug for opportunities that might not be the ones that are not immediately there. Maybe partner with Inclusion to think about non-traditional partners that are outside of federal agencies (e.g. tribes)
    - Jake: do you mean coproduction or end-users? End-users
    - Diana has given much thought to reaching out to tribal partners
  - Kathy: Come up with a strategy to facilitate researchers to learn about the needs of different communities. Web interface? Place for dumping ground of needs that have been identified. Give people tools to how to match up with stakeholders. **Match needs and skills** through community of practice in an inclusive way. Cast a wide net for people/problems that forecasting and help address.
    - Jake: raises interesting ethical questions / concerns / best practices. Not only needs for matching, but also **best practices for collaborations on operational forecasts**
  - Melissa: sometimes academic research drives. Have an opportunity to think about near and long term goals and help frame/shape how the academic research is done
    - Research has driven how partners engage, could we have partners play a more active role in setting needs
    - Difference between this team and Decision, the latter can be just as esoteric / theoretical as the ecological forecasters.

- Mike: Tapping into the experience of folks who have been involved with operationalizing forecasting. What are the lessons learned moving from research to operations. Lay that out to the community. How to do things right? How have things been done wrong?
  - Chris could put a list of lessons learned from NOAA perspective
  - As a group we can write blog posts (short term) and a full paper (long term)
- In addition to the many ideas we've discussed on this call, there are some notes from the "Next Steps" section of the Wed 1:30 Breakout notes from EFI2019 (see link above) that could inform potential future activities:
  - "Establish best practices of visualization of predictions"
  - "Best practices for validation. How to describe uncertainty for broader group."
  - "Best practices for roles in collaborations. Define role of each partner"
  - "Operational readiness vs technical readiness"
- Overall, with these and the many topics in the BO notes, this Working Group could be quite active for some time, and could certainly contribute to the RCN. That said, we can get started sooner than later, perhaps with some blog pieces, and/or a summary of the break-out notes.

When to next chat?

- End of August on. Jody to send out poll

Discreet tasks before the next call?

- Start drafting Blog post on R2O experiences (lead: Chris)
- Consider summarizing the BO notes and our discussion to date, for more of a conceptual (blog?) piece (lead: TBD)
- Kira: will think about how you match needs and skills (helpers: David)
- Terms of reference / scope of group document
  - Who's in the group, what we're supposed to be doing short/long term?
  - Charge / charter: Helps set priorities and allocate time more efficiently
  - Chris: could gin up a starting point
    - Could put in the working group folder
  - Jake: sustainability of the group, having a charge could help
    - Bunch more meeting notes from May, would be useful to continue to summarize notes, e.g. for a different blog piece
- Adjourn.