CNH Lakes Team Videoconference

January 5, 2018

1. Welcome & items from the team (Kelly)

2. Year 2 report update & thanks (Reilly)

3. Paper updates:

a. Framework paper (Kelly)

* Currently pulling together references, revising conclusion
* Will send out to co-authors shortly to ask specific questions
* If other team members would like to read through, they are asked to offer feedback only on bigger picture, conceptual issues (not minor grammatical or style suggestions)
* We hope to have it submitted in 1-2 weeks

b. Literature review paper (Nicole)

* A draft will be circulated amongst co-authors soon
* The paper’s concept has been presented to AMBIO
* Hoping to submit by late spring

c. PIHM-GLM paper (Hilary)

* Updating calibration for 30-year simulation (Kait nutrient inflows from Yahara); back-casting 30 years over 4 inlets
* Finished in December working on improving calibration for GLM right now; also improving for Julia’s 2016 simulation paper (in review); focus on anoxia
* Potentially could submit to special issue of L&O

d. GLM-hedonic paper (Weizhe)

* Jan. 16 deadline for authorship memo
* Expect to have a draft ready by March
* Kait sent GLM outputs, hedonic results will be ready soon
* Plan to submit to *Journal of Environmental Management* (interdisciplinary journal)

4. Updates & Objectives from modeling teams (everyone)

* Duffy PIHM –
  + OBJECTIVE: complete Sunapee calibration (first several runs already made)
  + OBJECTIVE: more analysis with Mendota, e.g. simplified Monte Carlo runs to bound uncertainty
  + OBJECTIVE: explore simplified version of PIHM that’s more amenable to implementing nutrients (semi-distributed model or meta-model) that breaks watershed into sub-units that preserve overall balance of flow and bring in capability of semi-distributed nutrients; more amenable to Cycles and other models; mass balance for each stream reach
* Cobourn SDP –
  + OBJECTIVE: investigate what makes a representative area, use PIHM to calibrate a meta-model with similar dynamics to spatially distributed model
  + Typical approach is to use stream length and edges of the lake as contributing areas; there’s a good topographic way to do that; question is about the resolution we want; crop weighting required within hydrologic sub-units
  + Loren Leonard will be working with Chris (within 6 months)
* Dugan/Farrell GLM –
  + Most of the time is spent on calibration (run time ~minutes for each run, but over MC simulations it’s time consuming)
  + OBJECTIVE: working on making that more efficient, with Kait using USGS inflows rather than PIHM
  + OBJECTIVE: Sunapee calibration going well; inflows settled, working now on computation time; anticipated within next month to quarter
* Rudstam GLM –
  + Coupled watershed/lake model funding from other sources
  + OBJECTIVE: RFP within the next month (undergrad honors student pulling together)
  + TO DO: share Dropbox folder with Lars
* Weng Hedonic –
  + Working on Sunapee model (waiting on observational data)
  + Then moving forward to Oneida with observational data
  + OBJECTIVE: finish GLM-hedonic coupling paper
  + Will do more analysis on Mendota with variable selection, etc.
* Fitchett CE –
  + Completed draft of research proposal, working on finalizing over the next quarter
  + Nicole/Mike/Leah working on a concept paper, Leah taking the lead on developing that over winter break; sending to a few team members soon – translational ecology and Sunapee involvement with GLEON
  + OBJECTIVE: coding documentation from LSPA; graduate seminar at VT (target data analysis for this)
  + OBJECTIVE: plan for summer field season including developing scripts/interviews at field sites, logistics
* Stachelek Scaling –
  + Developing chapter 1 research (connectivity); in parallel chapter 2 with more potential for engagement with this group (similar to what Chris discussed)
  + OBJECTIVE: development of a proof of concept for presentation at Year 3 workshop, build off idea of connectivity on P
* Weathers BI –
  + Meeting in Sunapee, optimize for interaction with LSPA
  + OBJECTIVE: visit to VT about how to set up meeting to do visualizations of modeling results
  + OBJECTIVE: work with Leah and Mike on their results;
  + Visit with each of other groups to collect information about setting up the meeting; CLA and OLA? Should we invite? Also friends of Lake Lillinonah, Vanni? Engage primarily LSPA now and support a broader meeting later; 1-2 OLA representatives at the meeting? Primarily to observe.
  + Sub-team meeting with Kak, Paul, CC, Lars. CNH project working with lake associations looking at fish in N. Wisconsin (Solomon at CIES), meet in WI with this other group, ensure broad engagement.

5. Administrative items:

a. UCOWR – January 22 abstract submission deadline, seeking 4th grad student presenter

b. Using Mendeley for reference management (Reilly) – Reilly will send out instructions on using Mendeley after the call; feel free to add in references

c. Reminder: save the date for this year's workshop, May 15-18 (Kelly), reservations at Dexter’s; Manchester or Boston