MEETING MINUTES

CNH Lakes – Monthly Video Conference

February 1st, 2019, 2:00 – 3:00 pm EST (1:00 - 2:00 pm CST)

Attendance: all project team members

1. Welcome & items from the team (Kelly & Reilly)
2. Project workshop reminder (Reilly)
   1. May 28 – 31, 2019
   2. Asheville, NC
   3. Will start getting a headcount in March
   4. Heads up: we will be doing reimbursements for the hotel stay
3. UCOWR submissions (Reilly)
   1. Next-level version of the AGU abstract
   2. Interdisciplinary team management abstract
4. Recap: Mendota model couplings & 2018 AGU poster (Kelly)
   1. We want to highlight this during the video call so that people can address any outstanding issues regarding model linkages.
   2. Also, what questions are interesting to answer from here? Something to think about as we move forward.
   3. Plan to make small changes to PIHM water balance, and nutrient inputs.
   4. Simplified nitrate model is not quite fully running yet; needs to be run using the right input data and calibrated, matched to PIHM results we already have.
   5. Would like to alter hydrology for different scenarios – this is possible using Cycles-PIHM. Hardest step is getting the simplified model up and running.
   6. Cycles still underestimates leaching, think this is macropore flow; keep this on the back burner, so to speak.
   7. For another project, Cycles-PIHM have been developed in a way that might be applicable to CNH Lakes…
   8. Simulation for switchgrass completed.
   9. 25% reduction in nitrogen is for all years in baseline, 2003-2014.
   10. Could use USGS data and build a machine learning model that takes input from PIHM, see if it can predict phosphorus.
   11. Need to talk through how we’re going to move forward
       1. Looking at how we can internalize externalities in the catchment system
       2. Can change land use over time, and change hydrology accordingly
       3. Need to run additional scenarios; can talk about options for subsidies, buy-outs, etc.
5. To do: Have a sub-group meeting about steps for moving forward.
6. Team updates (everyone) - Frame updates as related to model linkages, where possible!
   1. GLM
      1. Simple P cyling model is getting pretty close; hopefully within about 2 weeks of submitting.
      2. Cayelan and Paul have been working on latest version of GLM; hopefully can translate their work to Mendota.
      3. Kait is working on Mendota and Sunapee comparison; submitting April 12. On June 1, will be transitioning to another project.
      4. Nicole is working on chapter 1 of dissertation – baseline analysis for Sunapee; may be able to start working with old PIHM outputs
      5. Lars has published a paper on mussels on Oneida; state is funding modeling exercise for SWAT model of watershed, lake model; will have 2 new modelers on the project
   2. Scaling up
      1. Connectivity P paper accepted for publication; Joe will be taking exam.
   3. Civic engagement
      1. Leah visited CLA, got “behind the scenes” stories from the people there.
      2. Still coding documents; will be sharing results with committee towards end of March.
      3. Planning thesis defense around mid-June.
   4. Hedonic
      1. Still in editing process, hope to do submission this month.
      2. Kristen will be taking over where Sreeya was with scaling up; will be talking with Joe sometime this spring.
   5. PIHM
      1. Focus on simplified model, as discussed before.
   6. Economic decision-making
      1. Weizhe is working on literature review for economic modeling technique.
   7. Cycles
      1. Looking at outputs, focus on switchgrass.
      2. Wondering if Joe has any information on manure …
   8. Admin
      1. Interdisciplinary team management manuscript is coming along; in the process of systematically gathering project experiences from co-author; writing introduction.
      2. Have submitted an abstract to the Science of Team Science conference at Michigan State this May, will keep everyone posted.
7. Project sustainability: how do we keep moving forward? (Kelly/everyone)
   1. Wanted to talk about future opportunities for the project
      1. Where might we want to move with our next proposal?
      2. There is a CNH II program now, but may want to consider others.
         1. CNH II is different, as well as smaller
      3. Could explore international research…
      4. Before workshop, compile list of brainstormed programs, have a more in-depth conversation in person.
      5. May be a good idea to go outside of NSF.