MEETING MINUTES

CNH Lakes – Monthly Video Conference

September 7th, 2018, 2:00 – 3:00 pm EDT (1:00 - 2:00 pm CDT)

Attendance: all project team members

1. Welcome & items from the team (Kelly & Reilly)
2. Update on authorship guidelines (Kelly & Reilly)
   1. Small changes have been made to the authorship guidelines to be more inclusive of published datasets as products
   2. Updated version is now available on ODS home page
   3. No changes to memo; Still fine to use same authorship memo template
3. Year 4 Workshop dates & venue (Kelly & Reilly)
   1. Workshop will be in Asheville, NC
   2. Hotel Indigo in downtown expected to provide lodging and meeting space (contract not yet signed)
   3. Arrive on the evening of Tuesday, May 28
   4. Depart on the afternoon of Friday, May 31
4. Big paper (Kelly)
   1. Submitted AGU abstract on overarching model connection for Mendota
   2. Working to put 2 newer components into place:
      1. Cycles/PIHM – in discussion with Armen on how to do this
      2. Civic engagement – getting realistic scenarios from CLA
5. Team updates – quarterly check-ins on objectives (with slides)
   1. Scaling up – Joe
      1. P connectivity modeling paper – dealing with scaling up GLM work – has been submitted (revise & resubmit)
      2. Scaling up Cycles-PIHM-GLM coupling
         1. Can we use more detailed ag/soils data to improve WQ predictions?
         2. Identify a set of lakes in LAGOS with ag-heavy watershed and enough data, incorporate predictors – individual crops, soils data, maybe nutrient input data, etc.
         3. Model will predict lake N and P and nitrate as function of lake/watershed properties, individual crop details, etc.
      3. Input from group – how to make this a CNH item? Connect prediction idea with CNH topics? Will send out an authorship memo at some point; Interested in people’s input on how to get other members involved.
   2. Civic engagement - Mike and Leah
      1. Fully immersed in coding phase; did some additional document collection over summer, now working on coding
      2. Have finished coding 20 Beacon newsletters from LSPA, did initial analysis on those to see what we’ve got so far
         1. Early results show that education/outreach are major themes
         2. Will revisit coded items to extract context and meaning
      3. Looking at connection from GLM to CE
         1. Preliminary results: co-occurrence matrix for terms like algae, bacteria, bloom
      4. Upcoming goals – code all docs for LSPA and CLA
         1. Already have IRB approval to do some interviews while at LSPA, potentially some phone interviews
         2. Code-analyze, repeat!
   3. Hedonic - Weizhe and Sreeya
      1. GLM-hedonic coupling manuscript for Mendota has been presented at 2 conferences, have gotten some good feedback.
         1. Currently being revised
         2. Will submit to Journal of Environmental Management
      2. Hedonic model of Sunapee
         1. Now using updated property sales dataset
         2. View of Sunapee may matter for analysis, but will take a while to incorporate – will see how far they can get
      3. Machine learning to identify EMVs
         1. Preliminary results – Secchi, pH, total phosphorus seem to matter
         2. Will present at Univ of Colorado Boulder, get feedback
      4. We have such a range of WQ in our 3 lakes; can we stack these datasets to get a full gradient of property prices and WQ?
         1. Sreeya may be able to get at that with her work
      5. Scaling up – working to match existing property sales data with LAGOS
         1. This is a time-consuming procedure, taking into account multiple dimensions; still has a lot left to do
         2. Looking at what more we need from property sales data
   4. GLM – Kait
      1. Parameter set sharing/model versioning
         1. Had virtual meeting btwn VT and Wisc to work on updating models to GLM 3.0
         2. Will stick with current version for big modeling paper, though 30-year model for Mendota is using new version and working well.
      2. Aviah Stillman is now a staff member at center for limnology, continuing to work on updating P sediment model.
      3. Nicole presented 30-year simulation at ESA, is working to draft manuscript for 30-year simulation.
      4. Upcoming objectives – get papers written and submitted!
         1. Kait’s paper trying to get submitted to L&O in next few months
         2. Haven’t heard back from Ambio, but have been reaching out
      5. Lars says work is still pending funds, which are not anticipated to come through before next year.
         1. He recently gave a talk about long-term Oneida WQ, implications for use of bivalves
   5. PIHM – Chris
      1. Have updated model from Mendota and Sunapee.
      2. Yu Zhang just took a new job, plans to finish the sub-basin watershed budgets for Mendota in next week.
      3. Sunapee calibration – don’t have many long time series for flow, so trying to use groundwater level data from state agency, a few long-term records; a bit limited on calibration metrics but still working on it
      4. Will do same analysis for Sunapee as for Mendota
      5. Will have watershed budgets early- to mid-October
      6. How did they delineate sub-basins?
         1. Same way as overall basin – identify scale in a region; determine where streams are, find basin that surrounds the streams; can do different resolutions on these; this is an output from PIHM; working to share these boundaries along with complete water budgets.
   6. SDP - Weizhe & Kelly
      1. Across-media integrated assessment model
      2. Examine how GHG mitigation could incentivize BMP adoption
      3. How do we model the BMP effects? Still working on this.
         1. Dividing watershed into sub-basins; because different basins may have different travel times.
      4. Working with Armen on BMP scenarios; want preliminary analysis before end of year.
      5. Armen will help understand yield effects of BMPs; also working with Mike and Leah on which BMPs are most reasonable for CLA.
6. From Kait: ODS should have a running list of presentations & other publications
7. From Kait: Society for Freshwater science call for special sessions – translational ecology – might look into this with Nicole, do we want to submit our own special session?