Eflows Tech Team Mtg

October 2, 2018

* Noelle will send over observed analysis for comparison

Updates

* Belle – webinar, good attendance but recording didn’t work. Re-recorded it. Belle will send it to Sarah to add to CEFF website
* Website – Alyssa & Nick working on this…
  + Alyssa – add publications from eflows website to this, get webinar recording and presentation from Belle
* Sarah, Nick, Rob, Alyssa – sending out packet to fish experts to review clustering analysis
* Cancel/reschedule webinar on prediction methods/approach – push this until we have real results
* Nov 13th – next in person technical workgroup meeting
* Nov 6 – use monthly check-in meeting to prep for meeting
* Belle – started alternative scaling approaches that we discussed at last in person meeting
  + Have not yet done leave one out cross validations
* Sam – edited glossary and flow chart, met with CDFW to discuss glossary
  + Once we get the Instream Flow Council’s manual, we can update our terms to align with their glossary/definitions – maybe a diagram of this?
* Julie – working on funding agreement and natural flows database, will send out link again for group to provide feedback
* Ted – finalizing contract, working with Belle and Darren on flow modeling

Uncertainty Analysis

* Looking at stream classes, some segments may have lower certainty (how to categorize this?), set up logical ruleset about transitioning from one stream type to another
  + Nick will re-run this
  + Will flag reaches that don’t follow “rules” – can then analyze these
  + This is looking at areas where we’re most confident (and less) in the classification
  + PCA/multivariate analysis of geospatial attributes across stream classes, also overlay the SWAMP bioassessment data
* Identify outlier reaches within own classes
  + Flag reaches that don’t meet rule set
  + Herve/Belle – measure spatial statistics (treat each reach as its midpoint, for any point, you can see the entropy, evenness, richness is)
* Start with the above and then move on to the convex hull/PCA?
* After this, then we could maybe use expert opinion for making changes as a group
* Herve gave us access to google drive folder so we can compare his segments to Nick’s
* This is a lower priority task…

Water Year Typing

* Draw flow duration curves to see the different shapes for the classes – they look the same
* Forcing all data into 4 bins – losing variability
* Sam – non-dimensionalize data, divide it by average, see if the percentiles for all the COMIDs in the stream class line up
  + Time series from 0 – 1.2
  + Take quartiles of non-dimensionalized numbers
* Compare modeled to observed MAF, means, dimensionless MAF, SDs, etc
* Maybe 3 bins may be better to capture variability? Wet, moderate, dry types; or 5?
* Bill Trush, Darren Mireau – CalTrout , resource?
* Next steps
  + Re-do quartiles and SD and calculate dimensionless
  + Do all these with 3 and 4 bins
  + Compare this to observed data
  + Check back in with rest of team once this is done