Milestones and Achievements 2017

Bryan Milstead

12 Dec 2016 - 30 Sep 2017

Overall Rating:

CE 1 - Program Planning:

Rating: **self-rating: fully successful**

- Participate in ORD, AED, and MAB meetings and planning sessions
    - Details unknown (Target Date: Q2-Q4).
        * **Midterm Pars: ongoing**
        * **Final Pars: fully successful**
- Participate in planning and refinements for SSWR 4.01C Cyanobacterial research (Target Date: Q2-Q4).
    - Design the lakes database: work with colleagues to define what the database will include, how it will be stored, and what features it will include. (Target Date: Q3).
        * **Midterm Pars: ongoing**
        * **Final Pars: fully successful**
    - Assist in the development of a research plan for the twice-weekly monitoring of RI lakes (Target Date: Q3).
        * **Midterm Pars: ongoing**
        * **Final Pars: fully successful**

CE 2 - Program Implementation:

Rating: **self-rating: fully successful**

- Participate in implementation of SSWR 4.01C Cyanobacterial research
    - Develop a relational database of all lakes in the coterminous United States for use in cyanobacteria monitoring and research.
        * Database Development: develop and populate the lakes database (Target Date: Q4).
            · **Midterm Pars: ongoing**
            · **Final Pars: NLA2007 and NLA2012 reformatted and harmonized**
        * Document the Database: write draft of basic metadata for the database. (Target Date: Q4).
            · **Midterm Pars: ongoing**
            · **Final Pars: progressing but will not be complete until the database is ready**
        * Data Paper: begin drafting a publishable data paper describing the database features and how to access it. (Target Date: Q4).
            · **Midterm Pars: ongoing**
            · **Final Pars: progressing but will not be complete until the database is ready**
    - Bloom modeling for SSWR 4.01c. Assist with the analysis of the NLA 2007 phytoplankton and cyano toxin database.
        * Organize NLA data and convert to an R database (Target Date: Q2).
            · **Midterm Pars: partially done; change target to Q3**
            · **Final Pars: completed**
        * Analyze data using standard Ordination techniques (Target Date: Q3).
            · **Midterm Pars: ongoing**
            · **Final Pars: completed**
        * Prepare abstract for a presentation at the 2017 ESA meeting in Portland (Target Date: Q2).
            · **Midterm Pars: complete**

- · **Final Pars: completed**
- – Participate in proposed twice-weekly monitoring of cyanobacteria in Rhode Island Lakes
  - ∗ Field work as required (Target Date: Q3-Q4).
    - · **Midterm Pars: not started**
    - · **Final Pars: ongoing / near completion**
  - ∗ Help with database development and analysis (Target Date: Q3-Q4).
    - · **Midterm Pars: not started**
    - · **Final Pars: awaiting data**
  - ∗ If possible, become trained in the collection, identification, and quantification of phytoplankton (Target Date: Q3-Q4).
    - · **Midterm Pars: not started**
    - · **Final Pars: in progress; have worked with the Haney Lab (UNH) and other colleagues**
- Provide technical assistance to the Cyanobacteria Monitoring Collaborative
  - – Assist with the implementation of the "cyanoScope" project
    - ∗ Paricipate in ongoing identification of sumitted photos (Target Date: Q2-Q4).
      - · **Midterm Pars: ongoing**
      - · **Final Pars: advancing; working on getting additional taxononmists to help**
    - ∗ Help with training and analysis as needed (Target Date: Q3-Q4).
      - · **Midterm Pars: ongoing**
      - · **Final Pars: ongoing**
  - – Attend quarterly meeting of the CMC in Chelmsford (Target Date: Q2-Q4).
    - ∗ **Midterm Pars: ongoing**
    - ∗ **Final Pars: ongoing**
  - – Work with the CMC to document and archive data for 2015 & 2016 (Target Date: Q2-Q4).
    - ∗ **Midterm Pars: ongoing**
    - ∗ **Midterm Pars: 2015 complete; 2016 is ongoing; now we have 2017 data also**
  - – Manage data collection for 2017 (Target Date: Q4).
    - ∗ **Midterm Pars: ongoing**
    - ∗ **Final Pars: template data entry forms provided; data have not been returned yet**
  - – Assist with the analysis of 2015 & 2016 data (Target Date: Q2-Q4).
    - ∗ **Midterm Pars: not started**
    - ∗ **Final Pars: not started**

CE3 - Technical and Scientific Communication:

Rating: **self-rating: fully successful**

- Present paper on the bloom modeling work at the Ecological Society of America meeting in Portland OR, August 6-11, 2017. (Target Date: Q4).
  - – **Midterm Pars: abstract submitted; analysis in progress.**
  - – **Final Pars: presentation cancelled after discovering problems with the dataset**
- Consisidering submitting an abstract based on the CMC work the 2017 (November) Harmful Algal Blooms Symposium in Baltimore (Target Date: Q3-Q4).
  - – **Midterm Pars: not started**
  - – **Final Pars: not done**
- Draft data paper on lakes database for cyanobacteria research (Target Date: Q4).
  - – **Midterm Pars: not started**
  - – **Final Pars: not started**
- Draft manuscript for publication on the bloom modeling work (Target Date: Q4).
  - – **Midterm Pars: not started**
  - – **Final Pars: debating whether to move forward this due to problems with the NLA phytoplankton database**

CE 4 - Resource Management:

Rating: **self-rating: fully successful**

- As needed, assist in budgeting for and procurement of equipment and services for SSWR 4.01C (Target date: Q2-Q4).
  - **Midterm Pars: ongoing**
  - **Final Pars: ongoing**

CE 5 - Professional Interactions and Teamwork:

Rating: **self-rating: exceeds expectation**

- Forge new collaborations with URI and other academic institutions (Target date: Q2-Q4).
  - **Midterm Pars: ongoing**
  - **Final Pars: ongoing**
- Tentative: collaborate with the USGS to use the East Coast (combined MRB1 & MRB2) SPARROW model to analyze CMAQ scenarios (Target date: Q2-Q4).
  - **Midterm Pars: research plan submitted to USGS**
  - **Final Pars: completed**
- Questionable: collaborate with NSF project in Chile to collate, document, and archive data from a 30 year field ecology project (Target date: Q2-Q4).
  - **Midterm Pars: ongoing**
  - **Final Pars: ongoing**
- Participate on the AED Awards Board: serve as an MAB member to the board. Target date: Q2-Q4).
  -**Midterm Pars: Task added April 2017.**
  - **Final Pars: ongoing**
- Extra Stuff
  - 201706: provided additional support and data to the Chesapeake Bay team from an analysis I did for them in 2014.
  - 201707: provided landscape and population to data for NLA lakes to Betsy Hilborn