# Milestones and Achievements 2017

# Bryan Milstead

12 Dec 2016 - 30 Sep 2017

# **Overall Rating:**

# CE 1 - Program Planning:

# Rating:

- Participate in ORD, AED, and MAB meetings and planning sessions
  - Details unknown (Target Date: Q2-Q4). Midterm Pars: ongoing
- Participate in planning and refinements for SSWR 4.01C Cyanobacterial research (Target Date: Q2-Q4). Midterm Pars: ongoing
  - 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
  - Assist in the development of a research plan for the twice-weekly monitoring of RI lakes (Target Date: Q3). Midterm Pars: ongoing

# CE 2 - Program Implementation:

#### Rating:

- 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
    - \* Document the Database: write draft of basic metadata for the database. (Target Date: Q4). Midterm Pars: ongoing
    - \* Data Paper: begin drafting a publishable data paper describing the database features and how to access it. (Target Date: Q4). Midterm Pars: ongoing
  - 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
    - \* Analyze data using standard Ordination techniques (Target Date: Q3). Midterm Pars: ongoing
    - \* Prepare abstract for a presentation at the 2017 ESA meeting in Portland (Target Date: Q2). Midterm Pars: complete
  - Participate in proposed twice-weekly monitoring of cyanobacteria in Rhode Island Lakes
    - \* Field work as required (Target Date: Q3-Q4). Midterm Pars: not started
    - \* Help with database development and analysis (Target Date: Q3-Q4). Midterm Pars: not started
    - \* If possible, become trained in the collection, identification, and quantification of phytoplankton (Target Date: Q3-Q4). Midterm Pars: not started
- 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
    - \* Help with training and analysis as needed (Target Date: Q3-Q4). Midterm Pars: ongoing

- Attend quarterly meeting of the CMC in Chelmsford (Target Date: Q2-Q4). Midterm Pars: ongoing
- Work with the CMC to document and archive data for 2015 & 2016 (Target Date: Q2-Q4).
  Midterm Pars: ongoing
- Manage data collection for 2017 (Target Date: Q4). Midterm Pars: ongoing
- Assist with the analysis of 2015 & 2016 data (Target Date: Q2-Q4). Midterm Pars: not started

#### CE3 - Technical and Scientific Communication:

#### Rating:

- Present paper o 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.
- 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
- Draft data paper on lakes database for cyanobacteria research (Target Date: Q4). Midterm Pars: not started
- Draft manuscript for publication on the bloom modeling work (Target Date: Q4). Midterm Pars: not started

# CE 4 - Resource Management:

# Rating:

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

#### CE 5 - Professional Interactions and Teamwork:

# Rating:

- Forge new collaborations with URI and other academic institutions (Target date: Q2-Q4). Midterm 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
- 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
- Participate on the AED Awards Board: serve as an MAB member to the board. Target date: Q2-Q4). \*\*Midterm Pars: Task added April 2017.