

## STEAC MEETING REPORT (02/24/2021)

The STEAC met on February 24, 2021 with a quorum of eight members attending (Anne Giblin, Jackie Matthes, Kim Novick, Lillian Alessa, Mike Dietze, Peter Groffman, Rob Guralnick, Sparkle Malone). Ten NEON-Battelle staff attended (Chris McKay, Mike Kuhlman, Kate Thibault, Darcy Gora, Paula Mabee, Gene Kelly, Zoe Gentes, Mike SanClements, Keli Goodman, Bobby Hensley).

The meeting was virtual, and the following topics were discussed: I. Approval of previous minutes; II. Aquatic data product proposed changes; III. MDP promotional campaign; IV. NSF funding call for Center for Advancement and Synthesis of Open Environmental Data and Sciences; V. Amendment to Bylaws; VI. STEAC Nomination Call.

### STEAC Recommendations:

- The STEAC supports the proposed plan to remove Chl-a sensors from sites with low concentrations.
- The STEAC encourages Battelle to work with the Algal Taxonomy TWG to determine how to embrace the uncertainty in the data while Battelle develops the digital voucher flora and a harmonization plan..

I. **Approval of previous minutes:** Our last meeting was on December 16th. We discussed the Fall mtg, Challenging terrestrial sites; 2021 Meeting Dates; and NEON post-doctoral fellows. Peter Groffman made a motion to approve the minutes and Anne Giblin seconded the motion. The vote to approve the minutes was unanimous.

II. **Aquatic data product proposed changes:** Two changes to the aquatic data product were proposed: 1. to discontinue sensor-based measurements of Chl-a and 2. to create a digital voucher flora and harmonization plan for the algal taxonomy data.

**Discontinue the Chl-a sensors at low concentration sites:** Where Chl-a concentrations are low, the uncertainty (relative to grab samples) is great. Experts on the TWG suggest this data is not usable and savings to the budget can be used to increase the grab samples at sites where the sensors are removed.

The STEAC understands that the quality of data being captured at sites with low concentrations is poor and requires a deviation from the original plan to standardize across all aquatic sites. Increasing grab samples at low concentration sites would provide valuable data and the STEAC is in agreement with the proposed plan to remove Chl-a sensors. At NEON aquatic sites that were chosen to represent wildland conditions, chlorophyll is low and is likely to remain low.

**Algal Taxonomy Data Quality:** NEON contracts with multiple labs, which will change over time. Inconsistencies between the labs have already been noted. To maintain consistency through time, the TWG encourages Battelle to invest in developing digital voucher flora and a harmonization plan.

The STEAC understands the complexity of this issue and encourages Battelle to work with the TWG to determine how to embrace the uncertainty in the data. The proposed digital voucher flora and harmonization plan were well thought out and a viable option. Although we discussed DNA barcoding, this approach will still require the development of the digital voucher flora, and is not well enough developed for algae. It is also very expensive and would require cost sharing with other partners to be a feasible option.

III. **MDP promotional campaign:** The mobile deployment platforms (n=5) have not been

utilized. NEON has launched a campaign to make the community aware of this resource and seeks STEAC assistance in getting the word out.

- IV. **NSF funding call for Center for Advancement and Synthesis of Open Environmental Data and Sciences:** The solicitation for this Center is out. NEON will not lead a separate proposal but will partner with other institutions as desired by the lead institution. Paula Mabee is the point of contact for NEON.
  
- V. **Amendment to Bylaws:** The STEAC bylaws were amended to clarify the process of selecting new members to the STEAC. The original text: "Overall acceptance of a candidate will be determined by a yes vote of the majority of the standing STEAC, and then the STEAC will recommend the addition of the new STEAC member to the NEON PI for final approval. The invitation to join STEAC is tendered from the NEON PI and the STEAC Chair. The selection and publication of the STEAC membership for the upcoming year will be published on the NEON website by September 1st of each year." The amended text: "Overall acceptability of each-nominee will be determined by a yes vote of the majority of the standing STEAC. The STEAC, in consultation with the NEON PI, will prioritize their recommendations of nominees for each -vacant STEAC position to the NEON PI for final decision and approval." The STEAC voted to amend the bylaws was unanimous.
  
- VI. **STEAC Nomination Call:** The STEAC voted to approve the nomination call.