STEAC MEETING REPORT (11/15/2023)

The members of the STEAC met on November 15, 2023, with a quorum of nine members attending (Meghan Avolio, Henry Bart, Rich Fiorella, Shannon LaDeau, Steve Petruzza, Sydne Record, Daniel Rubenstein, Shawn Serbin, and Adrienne Sponberg). Eleven NEON-Battelle staff attended (Marie Faust, Nico Franz, Darcy Gora, Tristan Goulden, Mike Kuhlman, Christine Laney, Claire Lunch, Paula Mabee, Chris McKay, John Musinsky, and Kate Thibault).

The meeting was virtual, and the following topics were discussed: I. Approval of the minutes, II. LTER NEON partnership. III. Data Survey Results. IV. NEON involvement in NASA ARID and PANDEA initiatives.

- I. Approval of previous minutes for 10/18/2023. Minutes approved (Unanimous vote).
- II. LTER-NEON partnership: Prior to discussion of this topic the recent announcement of NSF sunsetting the Macrosystems Biology and NEON-enabled Science programs was briefly discussed. The STEAC raised serious concerns about this notice from NSF but tabled the discussion.

Following this, the STEAC was informed that NEON has been reaching out to the Long-Term Ecological Research (LTER) Network to discuss ideas for developing future relationships and research synergies with NEON-Batelle. A meeting was scheduled the week of November 21st where NEON would present what the new plans for NEON are within the latest award from NSF. Additional invites to the meeting include those from the science community who could speak to the use of combined LTER and NEON data to demonstrate the complementarity of the information from both networks. A primary goal of the meeting was to identify, coordinate and differentiate the different ways that NEON and LTER can serve the science community and communicate that planning to the NSF Program Office. Additionally, NEON noted that a meeting focus was to identify what could be supported with current funding to the networks and what would require additional new support. The STEAC was very supportive of the meeting and goals.

III. Data Survey Results: NEON presented recent results from their end-user data survey. It was noted that the response rate for 2023 was lower than the previous two years, that the ecological community (self-reported Ecologists) were the largest pool of respondents, and that Academics presented the highest user category. Overall, the results NEON presented to the STEAC identified a few important demographic trends, and highlighted that the terrestrial organismal data showed the highest usage while the largest decrease in surveyed use was the aquatic organismal, aquatic biogeochemistry, and remote sensing datasets. NEON reminded the STEAC that it's challenging to come to clear conclusions from the survey data given the relatively small number of survey respondents.

The STEAC requested additional information about the survey results, including more insight into the decline of aquatic data use. NEON suggested it could be a sampling bias given who responded and the lower response rate. The STEAC made several suggestions to try and increase the user survey response rate in future years. This included reaching out to authors of papers who cite/use NEON data to congratulate their publication and ask that they provide feedback through the survey, partnering with groups holding hackathons using NEON data (e.g. Environmental Science Innovation and Inclusion Lab) to garner feedback, as well as groups including the Ecological

Forecasting Initiative and Fluxcamp. Another issue that was raised by STEAC was how to identify potential users who never completed their analysis of NEON data because they were unsuccessful in working through their challenges of acquiring and / or using the data. It was noted that figuring out why some possible users were unsuccessful was important but a challenge. Additional discussion around ways to find successful and unsuccessful users to survey continued but meeting time expired before any concrete ideas were provided.

IV. NEON involvement in NASA ARID and PANGEA initiatives: Did not have time to discuss