**STEAC MEETING REPORT**
**(02/15/2023)**

The STEAC met on February 15th, 2023, with a quorum of thirteen members attending (Meghan Avolio, Michael Dietze, Jackie Matthes, Kim Novick, Steve Petruzza, Sydne Record, Shannon LaDeau, Daniel Rubenstein, Shawn Serbin, and Adrienne Sponberg). Five NEON-Battelle staff attended (Darcy Gora, Chris Florian, Paula Mabee, Chris McKay, and Kate Thibault).

The meeting was virtual, and the following topics were discussed: I. Previous minutes, II. TOS sampling suspension update, III. Discussion of the Battelle Response to the Dec. STEAC report, IV. Dust filter update, V. NEON tower height concerns, and VI. Spring meeting planning.

I. **Approval of previous meeting minutes:** Previous meeting minutes were discussed, reviewed and approved

II. **TOS Sampling Suspension Update:** Paula Mabee provided an update regarding the STEACs suggestion to suspend Terrestrial Observational Sampling (TOS) at the five gradient sites in their Dec. 2022 report to allow Batelle to manage ongoing budgetary challenges. The plan was to suspend TOS at the gradient sites in 2023 but in a written email update on Feb 9th, 2023, and during the STEAC meeting, Paula Mabee informed the STEAC that the NSF has secured additional funding to support the continuation of TOS at these five sites in 2023. However, NEON will have to rapidly ramp up recruitment to fill the TOS positions at these five sites prior to the sampling period. The STEAC inquired if the funding could also help fill positions at core sites across the NEON network through salary increases, bonuses or housing support. NEON reported that Batelle has restrictions on how the funding can be used for bonuses or salary increases. Housing support is being explored but would need to be on a site-by-site basis and pay increases are tied to standard rates, with little flexibility. The STEAC also inquired if NEON could provide a bonus to existing employees to move to one of the gradient sites from positions that are more easy to fill, but NEON reported they have restrictions that would make this difficult.

III. **Discussion and Approval of Battelles response to the Dec. 2022 STEAC report:** The STEAC took 5 minutes to conduct a final review of Batelle's response to the December, 2022 meeting report before moving to approve the report for the NEON website. The STEAC approved the report and the document will become public.

IV. **Dust Filter Update:** Chris Florian provided an update regarding the dry deposition product discussion during the January 2023 STEAC meeting. Following the STEAC recommendations in January, NEON reached out to the community regarding their sampling and dust filter issues. From these discussions, it was recommended that, given that the current filter approach for particle mass is too problematic, NEON suspend sampling in October 2023, and then find partner networks to work with to try and fill this gap. Regarding particle size samples, NEON examined the recent literature and is still exploring partners and options for collecting these samples across the NEON network. The members of the STEAC asked when to expect NEON to request input from researchers, and was provided a timeline of 1-2 months and that NEON will be talking

with other networks in March 2023. The members of the STEAC felt this was reasonable.

V. **NEON Tower Height Concerns:** NEON updated the members of the STEAC about challenges with tower height at some of their sites, including gradient sites. At some of these sites, the towers are reaching the end of their originally intended operation period and will need maintenance. In some cases the canopy height has grown enough to require increasing the tower heights, but this may then also cause issues with flux footprint contamination. This issue was also discussed in 2020 when the members of the STEAC recommended revisiting the height discussion, while the TWG has suggested monitoring changes in the data at these sites to identify data issues related to increasing canopy height. NEON reported that a major issue at some sites is the complex canopy where canopy height can vary considerably across the site and some of the taller vegetation may be creating new data issues. NEON presented two options to deal with the canopy height issue: 1) raise the tower heights or 2) cut back the taller vegetation and the benefits and downsides of these approaches were discussed. Other simpler height extension options were also discussed like installing a smaller tower or pole at the top of the scaffold tower to extend the sensor heights. The STEAC asked for more details about the cost estimates to raise the towers and also asked if a third option would be to just flag the data. NEON suggested that was an option as well as decommissioning a site. The STEAC also asked if selective logging was an option to target the tall trees. NEON indicated that wasn't their preferred approach but it could also be an option. NEON reported that community input suggests interests in collecting data at harvested sites. A continuation of this discussion was suggested.

VI. **Spring Virtual Meeting Dates:** Participants were asked again to select their optimal times for a 2-day spring meeting (May 15 - 19th). May 15/16 selected as tentative dates for the spring meeting, but the poll was left open.