

Battelle Response to NEON STEAC Spring 2022 Advisory Report

According to its Bylaws, the STEAC is “primarily an advisory body to the NEON Project and will provide strategic advice to Battelle, the NEON Principal Investigator (PI), and NEON Project staff on the planning, construction, and operation of the NEON Project and other relevant programs.” This response to the STEAC report from May 20, 2022, also combines the input of several members of the program team responsible for the execution of the NEON project. Battelle appreciates the thoughtful comments that the STEAC provided during this virtual meeting and the formal recommendations in this Advisory Report. Following are our responses to the key STEAC recommendations.

STEAC Recommendations:

I. New STEAC Members

We thank the STEAC for their consideration and input regarding STEAC applicants. We appreciate their attention to specific areas of expertise that will continue to move NEON forward.

II. Data Product Communications, Issues

We appreciate the discussion with the STEAC regarding how to optimize communications with users concerning data issues; we appreciate their acknowledgement of the ongoing challenge. Beyond posting issues on the NEON website and individual data product landing pages, we have been planning to enable opt-in automatic notifications for data product issues for registered users. Discussion with the STEAC indicated that mandatory account creation may present a barrier to NEON data use, so we do not intend to require a login in the foreseeable future. We appreciate the suggestion that a single landing page with up-to-date issues for all NEON data products would enable a useful issue overview for users. We are planning to enhance the existing issue logging system in AY23 to increase efficiency of reporting and ultimately discovery of issues by our end users by including these data product specific logs in a downloadable table, rather than nested within the readme.txt as currently designed. This enhanced system will also enable the subsequent development of the suggested landing page; we plan to develop this in AY23. We concur that involving the appropriate TWG leads in STEAC meetings will provide the STEAC with more information on data challenges, thus enabling them to identify additional solutions. We plan to do this in the upcoming year.

III. *NEON Connect* and the Ambassador Program

Discussion with the STEAC regarding the new community engagement tool that we are developing, *NEON Connect*, resulted in several key recommendations regarding how best to communicate the value of this tool to users. As we develop this product over the next ~six months, we will seek input of the STEAC so that we clearly communicate the benefits to users.

We appreciate the STEAC's input on our pilot of an Ambassador program. The intention of the program is to amplify the engagement and outreach activities of NEON, given the sizable potential user community at our continental scale. We plan to introduce Ambassadors to the STEAC to both provide STEAC members with additional insight into the program and provide Ambassadors with the opportunity to receive feedback from the STEAC, and we will continue to seek STEAC assistance in how we better enable Ambassador-led activities.

IV. NEON Field Staff Recruitment and Salary

The STEAC usefully questioned NEON Domain Managers about field staff recruitment, retention, and salary – topics that are of general interest across economic sectors currently. NEON is experiencing the same trends as others; we do not have data to suggest that we have an unusually high level of turnover relative to previous years. Salaries in ecology are lower than others in the environmental sciences, and as recognized, a long-standing issue. NEON pays a living wage that is comparable to other employers in this sector. As requested, we will share information gathered by Domain managers regarding declined job offers following the after-action review scheduled for July/August 2022.

We appreciate the interest of the STEAC in NEON's flat budget and their willingness to engage in discussion of trade-offs in the future. The current economic realities and supply chain issues present real challenges to NEON, alongside any project operating on a flat budget and requiring significant quantities of supplies. Consequently, we have been engaged with our TWGs to assist us in making difficult decisions when issues emerge to date. As discussed above, we plan to support improved communication between TWGs and the STEAC as requested.

V. Assignable Assets Program Business Model

We appreciate the continued attention of the STEAC to the Assignable Assets (AA)

program, and in particular their focus on how NEON could improve efficiency. As they recognized, the AA program is challenging because of the significant NEON staff time required to provide detailed budgets for PIs proposing use of NEON assets. As the AA program continues to grow, as desired by the NSF, and if NEON AA staff time increases at the same rate as current, NEON staff time in other areas (e.g., sampling, data QA/QC) must be reduced. Given the likely unacceptable tradeoffs, the STEAC suggested a quick feasibility review and general budget for proposed projects and a detailed feasibility and budget for awarded projects. As per STEAC request, we will provide data comparing proposed vs. awarded budgets. Further, we will follow up with the NSF regarding the STEAC suggestion to use an approach like the NSF Polar Programs and the NSF National Center for Atmospheric Research (NCAR).