Battelle Response to NEON STEAC Fall 2021 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 October 5 and 7, 2021 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 their virtual October meetings and the formal recommendations in this Advisory Report. Following are our responses to the key recommendations.

STEAC Recommendations:

1. **Sample use policy**

We appreciate the concurrence of the STEAC on our draft policy, and it has been formalized as written there. We agree that if significant public benefit can be shown, the priority of the request could be elevated for for-profit research companies. We also appreciate the offer to help reconcile conflicts if needed.

2. **Science Staff Hiring Plan**

We are pleased to be recognized for our proactive and planning to ensure a diverse candidate pool. We also recognize the difficulty of finding individuals who possess the array of skills required by many NEON positions. As recommended, we will continue to engage contractors where finding such individuals is not possible. We very much appreciate the specific suggestions of programs to contact to further diversify our candidate pool.

3. **Postdoc Program**

The productive conversation following presentations from our first cohort of postdocs was valuable to us, as are the many suggestions and considerations. We agree that the experience of the postdocs has been strongly influenced by the COVID-19 pandemic and associated limitations on in-person gatherings and travel, and thus it is difficult to fully assess the success of the program thus far. The potential to specialize the focus for postdocs in the future was noted (e.g., in instrumentation, cyberinfrastructure, etc.).

4. **Ambassadors & ESA**

We appreciate the suggestion to be prepared to invest resources in supporting the Ambassadors and their work and helping to co-create a role for that can support their skill set. The STEAC pointed out that many societies present NEON-related opportunities for Ambassadors, and we concur that our priority should remain building communities and research applications.

5. **Engagement**

We appreciate the STEAC's positive comments regarding our engagements, including those that leverage external expertise and paired with in-house NEON efforts (NEON-AmeriFlux, NEON-NCAR partnerships). We appreciate the suggestion to partner with JPL on remote sensing data products and are pleased to report that we have been actively doing so. The recently posted remote sensing scientist position will be responsible for integrating algorithm improvements from JPL and others in the community into NEON data products. We have also shared the NEON-NCAR example with our Ambassadors to hopefully inspire similar efforts with other organizations. We agree with prioritizing new ways to leverage existing and community-supported data pipelines to continue to improve data usability. As pointed out to Dr. Roberts (NSF PO), useability of NEON data will be critical to the overall success of the Observatory. We are glad that the STEAC is impressed by the community-accessible page developed by our work with *Dimensions*, which tracks publications and other products derived from NEON data.

6. **Research Data Alliance**

We concur with the approach to focus on particularly useful and relevant efforts in relation to our involvement in RDA and similar groups. Because of the important role of RDA in developing and setting broad standards, we believe there are many useful synergies to exploit in the future.

7. **Battelle NEON responses to other STEAC comments and suggestions**

We appreciate the feedback on the discoverability of the data product known issues, although we do want to encourage our users to read the README files. Claire Lunch has developed and is currently testing new functionality to generate a known issues file within the neonUtilities package, and the NEON Science Data Quality Integrated Product Team is exploring options for enhancing discoverability through additional mechanisms.