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**NSF 20-012**

## Additional Frequently Asked Questions (FAQs) for **NSF 19-586**, Critical-Zone Collaborative Network

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This document answers common questions associated with the FY2020 Critical Zone Collaborative Network Solicitation ([NSF 19-586](#)). These questions emerged from a series of webinars that were held in July and August of 2019. A recording of the webinar is available at <https://nsf2.webex.com/nsf2/lsr.php?RCID=5c895abd20cf17fa087576892bcbd20f>

These questions supplement and expand upon those that are found at the end of the solicitation ([NSF 19-586](#)).

1. What is the relationship of this program to the Critical Zone Observatories?
2. Can there be a Network site outside of the United States?
3. How is data management handled between the Thematic Clusters and the Coordinating Hub?
4. How can Thematic Clusters share monitoring sites?
5. How should the budget be allocated among potential shared sites in Thematic Clusters?
6. Is it required that Thematic Clusters should collect new data?
7. What is the purpose of the Engagement Plan and what should be included?
8. How can I connect with other collaborators for developing a Thematic Cluster proposal?
9. What should be the size of the proposal budget and how should it be partitioned in the budget categories?
10. Are the limits on the number of proposals per institution and PI applicable only to lead proposals?
11. How can proposals that are prepared and submitted separately be aligned to operate as a network?
12. Can existing monitoring sites be incorporated into a Thematic Cluster?

13. Will the Critical Zone Collaborative Network consider single-discipline proposals?
  14. May scientists from fields outside of Earth Sciences be on a proposal team?
  15. Are proposals that focus on a single watershed or catchment acceptable in this competition?
  16. How are the Broader Impacts divided between the Coordinating Hub and the Thematic Clusters?
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**1. What is the relationship of this program to the Critical Zone Observatories?**

The Critical Zone Collaborative Network replaces the Critical Zone Observatories. Funding for the latter ended in the previous fiscal year (FY19) and will not be continued.

**2. Can there be a Network site outside of the United States?**

This is addressed in the FAQs in the solicitation. Sites operated by foreign collaborators can be part of a cluster as long as no U.S. funds are supporting them; international partners should seek support from their own national agencies.

**3. How is data management handled between the Thematic Clusters and the Coordinating Hub?**

Data collection and initial processing will normally be done by the Thematic Clusters. The Coordinating Hub will make sure that the data structure, formatting, and metadata are compatible across the network. The Hub will be responsible for maintaining the network data repository. The Hub is not expected to support data collections at the Clusters, either financially or logistically.

**4. How can Thematic Clusters share monitoring sites?**

Thematic Clusters are united by research themes or science questions. Clusters may consist of one or more sites operated by different institutions. Sites are the places where interdisciplinary research will be conducted in support of Cluster science themes. It is conceivable that sites may be used by more than one thematic cluster and data collected at these sites will be shared. New locations for monitoring sites are welcome as are current CZOs, LTER locations, and other legacy data collection locales.

**5. How should the budget be allocated among potential shared sites in Thematic Clusters?**

Each Thematic Cluster proposal should allocate funds to accomplish the stated

objectives including data collection and equipment maintenance at sites that may also be part of another Cluster proposal. If both Thematic Clusters receive awards, budgets will be renegotiated to ensure that there is no duplication of effort and expenses

**6. Is it required that Thematic Clusters should collect new data?**

Clusters should be assembled to address overarching science questions. Data collected should be appropriate to the goals. If the science question can be addressed by mining legacy data, that would be an appropriate aspect of a Thematic Cluster proposal. Developing and testing models using data are also reasonable to include in proposals.

**7. What is the purpose of the Engagement Plan and what should be included?**

The Engagement Plan should explain the procedures by which other research teams may access sites and use facilities managed by the proposing Thematic Cluster. These research teams could have topics aligned with the Cluster or they might pursue other Critical-Zone research that will augment and benefit from the infrastructure. The Thematic Cluster is not expected to support other research groups financially. On the other hand, the Coordinating Hub may offer seed grants to outside groups to encourage research at the sites managed by Thematic Clusters.

**8. How can I connect with other collaborators for developing a Thematic Cluster proposal?**

NSF does not have a mechanism for facilitating the formation of teams for a Thematic Cluster. You should use your usual networking opportunities at professional meetings and websites to promote your ideas and align them with potential partners.

**9. What should be the size of the proposal budget and how should it be partitioned in the budget categories?**

The program expects to allocate \$7.5 million per year to support Thematic Clusters and up to \$1 million per year for the Hub. The upper limit for Coordinating Hub proposals is \$1 million annually. The size of the budget request for a Thematic Cluster should be aligned with the scope and goals of the proposed project. Budget allocation to various categories depends upon the needs of the specific proposal. There is no minimum or maximum to the number of sites that can be included in a Thematic Cluster proposal; the size should be appropriate to the research questions driving the project.

**10. Are the limits on the number of proposals per institution and PI applicable only to lead proposals?**

No. Institutional and individual limits on proposals apply to all proposals submitted to the competition, not just the lead proposal in a collaborative project. If more than the

maximum number of allowed proposals are submitted by an institution or PI, then those that are received at NSF after the limit has been reached will be returned without review.

**11. How can proposals that are prepared and submitted separately be aligned to operate as a network?**

The formal network will be established during the negotiations that follow selection of successful proposals. The formation of the network will be codified in the Cooperative Agreements between NSF and awardees. These Cooperative Agreements will specify the nature and extent of shared measurements and data formatting.

**12. Can existing monitoring sites be incorporated into a Thematic Cluster?**

Incorporating existing monitoring sites into a Thematic Cluster is encouraged where feasible and appropriate to the research goals. Operators of these sites can be PIs on a Critical Zone Collaborative Network proposal for that Thematic Cluster or they can include letters of collaboration affirming that they will accomplish the tasks outlined in the project description. It is possible that a site can be part of more than one Thematic Cluster with either collaborative mechanism.

**13. Will the Critical Zone Collaborative Network consider single-discipline proposals?**

Smaller proposals that focus on a single aspect of the Critical Zone, such as hydrology or biogeochemistry, should be submitted to core EAR programs. This call solicits those that are interdisciplinary, bigger in scientific scope, and may be larger in budgetary scale than typical for core programs.

**14. May scientists from fields outside of Earth Sciences be on a proposal team?**

Research into the Critical Zone is an interdisciplinary effort. Team members with expertise outside of the Earth Sciences are welcome. The size and expertise of the team will depend upon the research agenda of the proposal. It is anticipated that ad hoc reviewers and panelists will span a wide range of disciplines. Co-reviews by other NSF programs or divisions is not expected.

**15. Are proposals that focus on a single watershed or catchment acceptable in this competition?**

A goal of the Network is to examine Critical-Zone processes, structure, and function that are applicable beyond the confines of a single watershed or drainage basin. Successful proposals will articulate how the research plan will support this goal.

**16. How are the Broader Impacts divided between the Coordinating Hub and the**

## **Thematic Clusters?**

Each proposal is expected to articulate broader-impacts activities in accordance with NSF review criteria. Hub proposals should describe plans for national education, outreach and communication with the scientific community. Thematic Cluster proposals should specify activities of a local or regional nature and the means for connections with other Thematic Clusters. REU programs could be part of the Broader Impacts and these would be included in the proposal budget. Post-award REU supplements should not be expected.