

Implementing a Shared Project Management Strategy across NGEE-Arctic and NGEE-Tropics

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The NGEE-Arctic and NGEE-Tropics projects are major research efforts working to achieve – each in different terrestrial ecosystems – improved prediction of climate through knowledge derived from model-inspired studies in the field and laboratory. Both projects are composed of interdisciplinary teams collaborating across multiple national laboratories and institutions on a number of challenging and innovative science objectives. Given the complex and multi-institutional nature of NGEE research, strong science leadership and project management are of critical importance to ensure successful coordination of researchers, execution of tasks, and delivery on objectives. As such, NGEE-Arctic and NGEE-Tropics are working together to implement a common project management strategy that allows each to effectively manage team communications, information sharing, task and deliverables management, and to track performance and progress against a set of defined metrics.

Traditional project management methodologies are geared toward projects in which solutions and requirements are rigidly defined, large changes in scope are not expected, and tasks are routine and repeatable. Cutting-edge science research programs, however, require an approach of flexibility and agility because deliverables are novel, iterative and may transpire over the course of years. It is a significant challenge for researchers, project staff, managers and stakeholders to confidently address a constant flux environment of risk and change while showing progress on project vision and goals.

As one component of meeting these challenges, the collaboration software **Teamwork Projects** is being adopted to provide a comprehensive project management framework for identifying and tracking tasks, setting milestones, sharing documents and information, and following progress within a collaborative environment that allows for project transparency in the following ways:

- Provides clarity into work processes (i.e., who is doing what, when, where)
- Facilitates discussions between interdependent teams
- Team members are empowered to document their progress and issues
- Supports the sharing of “tacit knowledge” that may otherwise remain with individuals
- Supports team understanding and focus on the big picture – project goals and vision
- Allows management to monitor and respond readily to change

Although early in the process, the collaboration software also looks to provide the opportunity to track and collect useful metrics for a common dashboard reporting to sponsors from the two projects.