The Future of Environmental System Science

ESS Virtual PI Meeting Webinars

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Program Evolution

- In the FY 2021 (White House) budget request, BER is requesting funding for Environmental System Science (ESS) instead of requesting funding for the TES or the SBR programs.

- The budget request refers to ESS as an “activity.”

- The proposed/temporary vision for ESS is to:
  “develop a unified predictive capability that integrates scale-aware process understanding with unique characteristics of watersheds, coastal zones, and terrestrial-aquatic interfaces that are present in, e.g., the Arctic, boreal zone, and the Tropics, including the Great Lakes.”

- Research within ESS will “… provide an integrated, robust and scale-aware predictive understanding of environmental systems, including the role of hydro-biogeochemistry from the subsurface to the top of the vegetative canopy.”
Program Evolution

• Based on the vision and statement of research, ESS maps to the same Grand Challenges in the EESSD (formerly CESD) Strategic Plan as the TES and SBR programs did.

• Assuming Congress accepts the proposed change, the new program will be called Environmental System Science (ESS).

• A more generic program name provides more flexibility in program scope.

• Due to the pandemic and associated delays, the TES and SBR program managers were forced to delay planning sessions/retreats until this summer.
Implications

While details are still emerging, here’s what to expect:

• ESS will build off the legacies and successes of the TES and SBR programs.

• In the near-term,
  • PI’s won’t see much of a change in the scope of research.
  • Essentially ESS will have 2 sub-programs that function “business as usual”.
  • PI meetings, cyberinfrastructure and other joint activities will continue, but in a more integrated fashion.
  • Planning for a combined program website.
  • ESS will develop a new “mission statement” to focus future efforts solicitations and programs.
  • Program managers may shuffle POC responsibilities due to new team members.
Implications

• In the mid-term
  • SFA’s may evolve as they come up for renewals.
  • ESS will form stronger integration with other BER programs.
Questions?

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