Purpose

Changes in climate, demography, technology, and subsequent environmental, economic, and geopolitical responses are driving efforts to modernize long-term planning strategies. Moving forward, extended range earth system predictions/projections will be incorporated into strategic decisions over the 2 to 30-year time range in order to mitigate cost and vulnerability of national security, economic vitality, infrastructure, and natural resources.

The present situation risks each user separately seeking potentially inappropriate information to inform multimillion-dollar decisions of long-term scope, or misunderstanding or misusing the information found. Limited resources do not permit any individual agency to address these issues comprehensively, nor do all the decisions fall within any one agency’s individual mission. However, the commonality of the physical problem creates opportunities to pursue a coordinated capability across agencies.

This exploratory workshop will discuss the need for coordinated updating of physical earth system predictions to support a wide range of long-term decisions; the effort may draw on multi-agency expertise and existing or emerging capabilities. The workshop will focus on the challenges of providing and maintaining an updating but non-operational capability, including the potential dual use of ongoing research efforts for decision support. Discussions will emphasize collaborative efforts to create paths forward and facilitate inter-agency efficiency. Ultimately, the workshop will serve as a foundation for continued information exchange leading to a unified, reliable, and actionable prediction capability. The workshop is intended to build on the work of agencies involved in the USGCRP and USCLIVAR.

Attendance consists primarily of representatives from all Federal agencies participating in FCMSSR, most of them involved in the USGCRP, providing long-range predictions/projections, and using/potentially using long-range predictions/projections of the earth system in their decision processes.

https://cpaess.ucar.edu/meetings/2019/interannual-to-decadal-workshop

https://earthsystemprediction.gov

national.espc@noaa.gov
### Day 1 - Wednesday, 5 June

#### Opening Session

- **0830** Welcome and Purpose
  - Michael Bonadonna

- **0845** Overview of NAS reports 2-30 yr
  - Scott Sandgathe

#### User Needs

- **0915** Department of State
  - Fernando Echavarria

- **0930** Sea Level Variation and Impacts
  - Ben Hamlington

- **0945** NOAA/NWS
  - Hendrik Tolman

- **1000** Morning Break

- **1015** USDA
  - Mike Brusberg

- **1030** Department of the Air Force
  - Michael Farrar

- **1045** Insurance
  - Rob Galbraith

- **1100** [Discussion] The definition of needed capabilities
  - Dave McCarren

#### Present Capability and Research Efforts

- **1200** Lunch

- **1300** Department of the Navy
  - Joshua Cossuth

- **1315** Department of Energy
  - Renu Joseph

- **1335** USGCRP: National Climate Assessment
  - Corrine Hartin

- **1405** Afternoon Break

- **1420** USGCRP: Interagency Group on Integrative Modeling
  - Renu Joseph

- **1435** [Discussion] Needs vs. Capabilities
  - Jessie Carman

#### Day 2 - Thursday, 6 June

- **1530** Synopsis and Discussion
  - Scott Sandgathe

- **1600** Adjourn Day 1

#### Day 2 - Thursday, 6 June

- **0830** The decadal prediction grand challenge
  - David Titley

- **0900** Overview of Day 1
  - Johnna Infanti

#### Emerging Capability and Research Efforts

- **0930** International challenges
  - Shanna Pitter

- **0945** NASA
  - Andrea Molod

- **1000** First Break

- **1015** Academia
  - Lisa Goddard

- **1030** Commercial Sector
  - Mary Glackin

- **1045** NOAA
  - Tom Delworth

- **1100** Second Break

- **1115** Second Break

#### Fulfilling User Needs

- **1130** Advancing operational infrastructure
  - Arun Kumar

- **1200** [Panel] Next Steps
  - John Cortinas

- **1245** Closing Discussion
  - Jin Huang

- **1330** Adjourn