Research Project Management: A JCESR Case Study

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JCESR 1.0 Project Management Process
Traditional 5-Year Approach

Team Organization
Project Work Breakdown Structure (WBS)
WBS Dictionary
Resource Loaded Schedule
Milestone Performance
JCESR 1.0 Project Management Process
Hybrid Approach

Team Organization
Project Work Breakdown Structure (WBS)
WBS Dictionary
Resource Loaded Schedule
Sprints
Milestone Performance
Stakeholder Comment: “...cross-disciplinary, cross-organization efforts like the sprints leverage the strength of JCESR in way that is not possible with individually-funded researchers.”
JCESR 2.0 Project Management Process Rolling Wave Planning

Scope, Milestones, & Deliverables
Annualized Project Plan
Milestone Performance
Annual Re-Planning Effort

Annual Rolling Wave Cycle
Why Research Project Management?

- Using project management principles in research sets proper expectations around:
  - What can be accomplished (scope),
  - By what resources (cost), and
  - By when (schedule)

- Innovation in research requires innovative milestone setting

- Managing to reasonable and achievable milestones:
  - Allows for clear communications with team members and all stakeholders
  - Creates an open dialogue about scope, cost, and schedule changes

- Ensures delivery of scientific outcomes