



## BER investments in computing facilities

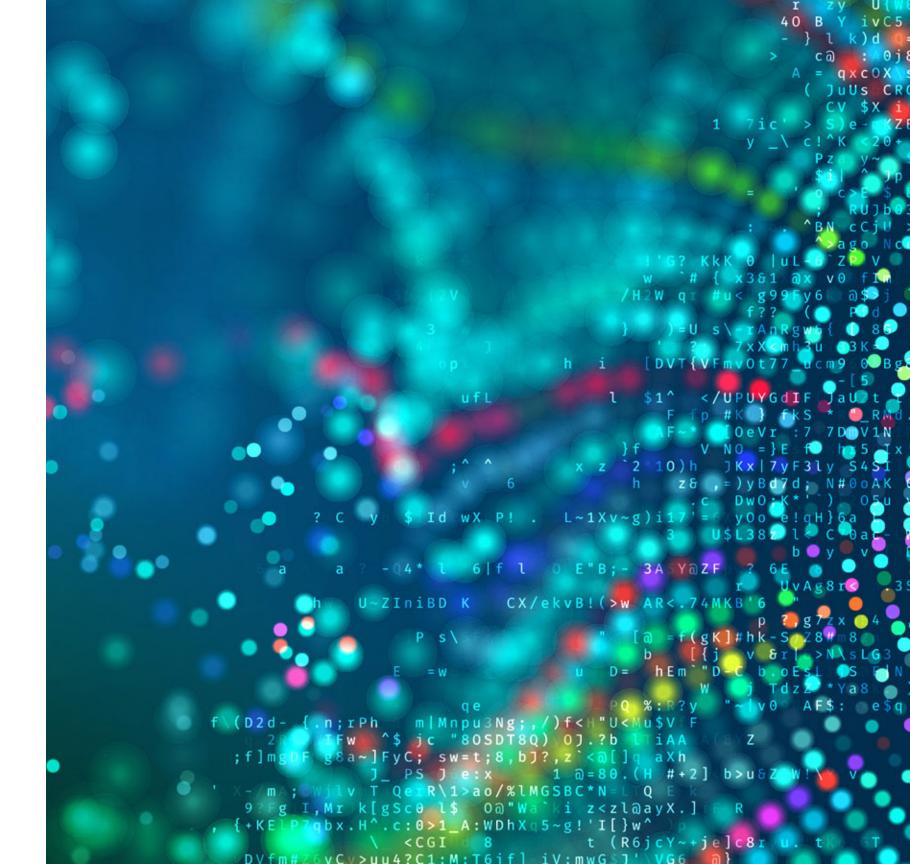
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PNNL is operated by Battelle for the U.S. Department of Energy



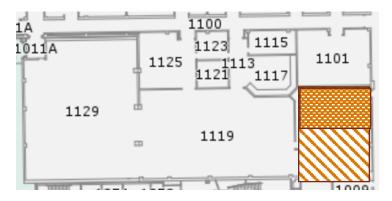




## **EMSL Computing Facility**

- Experienced systems administrators, computing operations staff
- Currently houses EMSL's Cascade system, slated for retirement
- Installation of EMSL's Tahoma system, June 2020
- Plans to house a system for the ESS Coastal research program
  - heterogeneous, high-performance midrange computing system
  - software stack for the diverse code base needed for modeling hydrology and geochemistry processes in watersheds, atmospheric and earth system processes

> 8500 ft<sup>2</sup> raised floor space





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## BER compute resource planning

- Access and eligibility
  - open to DOE BER funded research projects
  - requests reviewed and approved by BER program managers
  - available semi-annually for large allocations
  - available continually for small allocations
- Usage and queues
  - target < 80% utilization</p>
  - reserved nodes for interactive use
- Data transfer
  - ESNet upgrade to 100Gbps, and 400 Gbps when available
  - Globus on DTNs
- Support
  - Distributed support for science applications