Building Generation Z Lab Capabilities:
Energy & Minerals Mission Area Starting Point

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Issue

The Energy and Minerals Mission Area (EM) maintains a large number of laboratories that primarily serve EM and the Environmental Health (EH) Mission Area but which are also utilized by scientists in other USGS mission areas and external partners. The laboratories perform chemical, physical, and geophysical analyses of rock, mineral, soil, liquid, metals, and biological materials. Detailed information concerning the types of analyses, staffing, instrumentation types and age, procedures, and capabilities is currently being gathered as part of the charge to the Strategic Lab Committee. The upcoming moves (Menlo to Moffett, Denver Building 20 relocation) together with anticipated USGS budgetary and realignment pressures provide a unique opportunity to fundamentally restructure USGS laboratory capability for the 21st century.

Background

The Energy and Minerals Mission Area supports a large number of labs at Menlo Park, Denver, and Reston. The labs perform a wide range of analyses in support of the mission area and are used by other researchers in the USGS, primarily those in the Environmental Health Mission Area. The upcoming moves and budgetary and realignment pressures provide the opportunity to strategically examine our analytical capabilities and determine what capabilities may be outdated for current and future work and what capabilities the USGS lacks but may require in the future. Where possible and feasible, it is also a unique opportunity to realize efficiencies by eliminating duplicative capabilities. Such an analysis is critical to minimize costs of the moves and to align analytical capabilities, staffing, and laboratory location for effective research.

The Menlo Park to Moffett Field move provides the unique opportunity for USGS personnel to interact with world-class scientists and laboratory capabilities at NASA. What USGS analytical capabilities can best enhance the synergy between USGS and NASA at Moffett? Conversely, which labs currently in Menlo may enhance other laboratory centers, especially Denver?

Building 20 at the Denver Federal Center houses much of EM's laboratory capability in Denver. If a suitable new location is identified, what laboratories should be moved to the new facility, what laboratories should be closed with analytical work performed externally (contracted), and what new analytical capabilities are required for the USGS to strengthen its critical research?

EM also maintains significant laboratory capabilities in Reston. Given pressure to move personnel from the DC area and to cut costs, what laboratory facilities in Reston could be moved to either Denver or Moffett or be discontinued due to duplication elsewhere in the USGS or because such analyses could be performed more cost effectively externally?

A larger question is should Denver be the site for the major EM laboratory footprint? What would the estimated costs be of moving the Denver laboratory capability to a different location?

Challenge and Expectations

Develop a strategic vision and plan for EM labs for the 21st century taking into account the realities of moves and budgetary and alignment pressures. The plan should take into account the recent information collected by the Strategic Lab Committee, science directions for the mission area and the Bureau, and costs of proposed laboratory moves and required capital investments. It should also highlight the opportunities for cost savings of moves and consolidation as well as the strategic investments required to ensure world-class USGS research.

Resources

Lab Census Report, Energy and Minerals
Statistics, USGS Labs