ACTION LEARNING SCENARIO # 2

Data Integration

Champions: Karen Siderelis and Kevin Gallagher

Background

"The USGS will use its information resources to create a more integrated and accessible environment for its vast resources of past and future data." So reads the introduction to the Statement of Operational Direction for data integration in Facing Tomorrow's Challenges: USGS Science in the Coming Decade ("Science Strategy" – see http://internal.usgs.gov/director/science_strategy/).

This operational direction forms a large portion of the underpinning for the six science themes described in the Science Strategy. Each theme and much of the current interdisciplinary science work going on throughout the USGS requires more and more sophisticated methods of accessing and analyzing scientific data. A number of data integration challenges must be met with creative leadership and solution building before the "Visions for 2017" described in the Science Strategy can be realized.

Scenario

As part of a USGS interdisciplinary leadership team, you have an opportunity to identify a small number of concrete steps that can be taken within one year to begin implementing the eight strategic actions outlined in the Data Integration and Beyond section of the Science Strategy. The steps should include the following considerations:

- Be inclusive of every discipline and major program in the USGS
- Include touch points with major external science partners
- Design solutions to provide short-term (less than two years) tangible benefit to projects and initiatives associated with the strategic scientific directions described in the Science Strategy
- Include elements that can be measured in terms of Government Performance Results Act (GPRA) goals within BASIS+ projects
- Include elements that can be described in individual performance measures of key USGS leadership personnel (e.g., Executive Leadership Team members, Program Managers, etc.)
- Include in your thinking the conceptual relationships between key Discipline-based information systems and scientific data collection methods (e.g., National Water Information System and water quality measurements, National Geochemical Database and geochemistry lab processes, etc.)
- Describe organizational methods and leadership actions that can be undertaken to mobilize talented workforce elements from throughout the USGS scientific discipline structure

- Include creative ways to provide incentives to all aspects of the organization from principal investigators to science center leadership to discipline leadership for active participation in making data available for integration

- Consider creative methods to address cultural dynamics that may effect the ability to access and integrate important scientific data

In this exercise, do not be concerned with any particular technical dynamic involved in data integration. This Action Learning Scenario is about finding creative leadership solutions to mobilize the combined talents of the USGS workforce toward an overarching goal.

Outcome

The Data Integration Blueprint Team will meet via conference call with the leadership team developing the response to this Action Learning Scenario to hear and discuss recommendations. The Blueprint Team would also appreciate a short, written synopsis of the recommendations provided via email to the champions listed on the cover of the scenario.