

## **Action Learning Scenario - Leadership 201 - July 21-24, 2014**

### **Title: Diversity and the USGS science pipeline**

***How can USGS more routinely identify, communicate, and address our status and progress toward a diverse organization? How can USGS identify barriers and obstacles that prevent women and minorities from achieving the highest possible rank for their position? What steps can USGS take to recruit and maintain female and minority scientists, as both operational and research grade scientists?***

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#### **Issue/Challenges**

Developing and supporting a diverse workforce is critical to the future of the USGS. How can we move the bureau's discussion of diversity from a periodic inquiry to a routine part of our business? For example, we do not question the principle that diversity is important to the organization, but what specific benefits do we envision from a diverse USGS, and what types of diversity goals might help us take better steps to realize those benefits? What standard annual data should be collected to measure our progress toward those goals, and what types of interpretation should be routinely applied to track and explain these issues for the organization? Beyond data collection, what events, conversations, training, or experiences support a diverse science workforce?

In recommending data collection approaches, it will be important to consider the intended use of the data, and what information is needed to identify both general trends and specific issues. As an example, consider the following statistics on women in USGS science positions, and a set of questions that are only partially addressed by the available statistics. What types of questions may be most effective to shape a diversity effort? What types of data collection would help address these questions not only once but on a routine basis?

#### **Example: Women in USGS Science Positions**

The USGS has made substantial advances in hiring women for full-time employment over the past 40 years. Between 1976 and 1996, the percentage of women in the USGS workforce increased from 28 to 35%, and it has remained at ~37% of the workforce since 2009. Of all female USGS employees in 2013, 10% are in RGE/EDGE/ST positions, and numbers are not available for operational scientists and technicians. What mechanisms should be put in place to routinely track gender and other diversity in the scientific workforce of the bureau? What processes can be used to determine whether USGS diversity mirrors that of the science recruitment pool? What processes could be initiated to observe and document the concerns of the bureau scientists regarding potential biases in hiring and promoting female and minority scientists?

(There may be other issues that may merit separate examination, such as safety in field situations, the impact of child-bearing on professional progress and development, the need for workplace flexibility to accommodate family needs, and harassment, among others.)

- As part of a focus on diversity, is a special or separate effort required for women scientists and support staff?
- In what ways may women at USGS encounter advancement issues that are similar to, or different from, advancement challenges faced by minorities?
- How can we better understand the science pipeline for women in the organization and, insofar as the pipeline is differentiated by gender, how early in women's careers might different challenges begin to separate women's career tracks from men's?

Examination of policies established by academic institutions to bring the diversity of their departments in line with that of society may be instructive, although universities also have the secondary role of influencing the diversity of students in the recruitment pipeline. Comparison of processes associated with gaining tenure may not be comparable to promotion practices at USGS, because there is a time-limiting component associated with gaining tenure, and that is not an issue at USGS. It also may be useful to examine policies that have been instituted in private companies to address diversity issues in their scientific divisions.

### **Background Material/Resources**

NRC (2010) Gender Differences at Critical Transitions in the Careers of Science, Engineering, and Mathematics Faculty

Wallace, J. (1996) Status of Women in the U.S. Geological Survey. 45 pp.

USGS RGE/EDGE/ST statistics 2010-2013 and Grade Comparison of Female and Male Employees (2004, 2009 and 2014) (spreadsheets from Jo-Ann Domingue)

Powerpoint "Women in the Workforce: Trends in the USGS and Beyond"

### **Expectations**

Our hope is that Leadership 201 students can recommend ways to move the bureau's discussion of diversity from a periodic inquiry to a routine topic with supporting practices, ranging from data collection to regular events or training sessions. To that end:

What are the questions that should be addressed in a methodical assessment of the status of women and minority scientists in the USGS? What data collection is needed for such an "end to end" analysis?

Beyond bureau-wide data collection, what Center-level events, conversations, training, or experiences support a diverse science pipeline?

What is the most important first step(s) in identifying any barriers to the advancement of women and minority scientists in the USGS?

Are there critical transitions in the careers of women and minority scientists at USGS and how do we go about building support at these junctures?

Are there models from other governmental, scientific, or academic institutions that we might consider?

Are there additional resources, within the Federal government or among other partners, that could support our progress toward a diverse scientific workforce?