What Skill Sets are Agencies Looking for in their Employees?

An Example from the U.S. Geological Survey

Dr. Thomas J. Casadevall

Director, Central Region
The USGS is a world leader in the natural sciences through our scientific excellence and responsiveness to society’s needs.

The USGS serves the Nation by providing reliable scientific information to:

- Describe and understand the Earth
- Minimize loss of life and property from natural disasters
- Manage water, biological, energy, and mineral resources
- Enhance and protect our quality of life
SCIENCE PROGRAMS

• Provide the science needed to support the sound management and conservation of our Nation's biological resources

• Provide objective, reliable earth-science information on geologic hazards and resources and the Nation's geologic framework

• Provide the Nation's basic geospatial data, ensuring access to and advancing the application of these data and other related earth science information for users worldwide

• Provide the hydrologic information and understanding needed by others to achieve the best use and management of the Nation's water resources
BIOLOGICAL RESEARCH
FY 03 Enacted Appropriations

- Biological Research & Monitoring
  - $132,997,000

- Biological Information Management & Delivery
  - $22,936,000

- Cooperative Research Units
  - $14,993,000
GEOLOGIC HAZARDS, RESOURCES, AND PROCESSES
FY 03 Enacted Appropriations

- Geologic Hazard Assessment
  - $75,481,000

- Geologic Landscape & Coastal Assessment
  - $79,213,000

- Geologic Resource Assessments
  - $79,999,000
NATIONAL MAPPING PROGRAM
FY 03 Enacted Appropriations

• Cooperative Topographic Mapping
  – $ 81,651,000

• Land Remote Sensing
  – $35,945,000

• Geographic Analysis & Monitoring
  – $ 16,481,000
WATER RESOURCES INVESTIGATIONS
FY 03 Enacted Appropriations

- Water Resources Assessments & Research
  - $98,088,000

- Water Data Collection and Management
  - $39,562,000

- Federal-State Cooperative Water Program
  - $64,855,000

- Water Resources Research Act Program
  - $6,002,000
Employment in the U.S. Geological Survey
Count of All Active Employees at End of FY
Employment in the U.S. Geological Survey

Average Age of Employees at Beginning of FY 2003

- Administrative Biology
- Director's Office Information
- Geographic Geology
- Geography
- Water Resources
- All Disciplines

Average Ages:
- Administrative Biology: 45.5
- Director's Office Information: 42.6
- Geographic Geology: 42.7
- Geography: 47.7
- Water Resources: 48.0
- All Disciplines: 44.1
Federal Government Wide
2002 Organizational Assessment Survey

Employees are Positive About:

- Their contributions to the science mission
- Having the information & tools they need.
- Their relationship with their customers.
- Their work.
- Their supervisor’s skills.
- Their supervisor supports employees family & personal responsibilities.
- The USGS being a rewarding place to work.
2002 Organizational Assessment Survey

Things to Work On

• Morale
• Senior leadership providing a compelling vision.
• Making investments needed to ensure long-term viability of our science.
• Recruiting & retaining talent needed for the future.
2002 Organizational Assessment Survey

Things to Work On

- Bureau’s new management structure & business processes
- Science planning process
- Migrating more dollars to science
- Overcoming barriers to working across disciplines
- Implementing common business practices
2002 Organizational Assessment Survey

Two Key Issues

1. USGS not viewed as preparing adequately for the future.

2. Organizational changes are not seen as achieving their intended results.
USGS Not Adequately Prepared for the Future?

- Insufficient understanding, confidence, and/or support for the direction and investments being made to prepare for the future.

- Vision not compelling & doesn’t make good use of science disciplines.

- Scientists believe now program planning process doesn’t give them adequate opportunities for input.
USGS Not Adequately Prepared for the Future?

- Changes will not enhance science impact, excellence and leadership.
- Not making investments needed to ensure long-term viability of our science.
- Can’t compete for or retain talent.
- Not effectively overcoming “turf issues” or barriers to working across disciplines.
USGS Employees of the Future

- Science excellence
- Interpersonal skills / team efforts
- Communications skills – written and verbal
- Flexibility and adaptability
- Energy
- Balance
- Curiosity
- Understand USGS mission / non-advocacy
Challenges facing USGS in the Workforce Area

• Currency of key science and technical skills
  – Aging of the workforce
  – Recruitment and Retention
• Public perception of government workers
• FTE management
• Competitive Sourcing
• Changing demographics
• Stagnant / declining budgets
• Expectations of the Department of the Interior
Department of the Interior
Management Agencies

- Fish and Wildlife Service
- Bureau of Land Management
- National Park Service
- Bureau of Reclamation
- Minerals Management Service
- Bureau of Indian Affairs
Expectations of the USGS Workforce

• Department of the Interior expects that USGS will provide science that is relevant to DOI needs

• Tactical science – used to address an immediate problem of interest to land and water managers

• Strategic science – longer-term, hypothesis-driven science to address longer term management issue or problem