

Action Learning Scenario #1
Room 102
The National Research Program within the
Context of the USGS Strategic Directions

ELT Champion: Bill Werkheiser, Associate Director
for Water

Sponsor: Jerad Bales, Chief Scientist for
Hydrology

Coach: Jeff Frey

Action Learning Team

1. Margaret Berry
2. Janice Fulford
3. Dave Hebert
4. Denise Huntsman
5. Keith Richmond
6. Diana Silva

- Jerad will be present on both Monday and Friday -As co-coordinator of the L201 class, Bill will be present all week (serving as a coach for another ALS team)
- Copies of background materials provided by Champion and Sponsor will be placed in breakout room #102 for the Action Learning Team

The National Research Program Within the Context of USGS Strategic Directions

ELT Champion: Bill Werkheiser, Associate Director for Water

Sponsor: Jerad Bales, Chief of Research and Programs for Water

Issue: The National Research Program (NRP) was begun in the 1950's, and probably was at its greatest strength in the 1980's. The NRP encompasses a broad spectrum of scientific investigations to gain a fundamental understanding of the processes that affect the availability, movement, and quality of the Nation's water resources. Results of NRP's long-term research investigations have led to the development of new concepts, techniques, and approaches that are applicable not only to the solution of current water problems, but also to future issues that may affect the Nation's water resources. Basic tools of hydrology that were developed by the NRP are in common use today throughout the USGS, in other agencies, and in the private sector.

Almost two-thirds of NRP scientists are eligible for retirement, but current funding limits the number of replacements that can be hired. Almost 95% of NRP funds are for salary. For example in the last year, we have had about 10 retirements and 3 new hires.

About 10 USGS Programs contribute funding to the NRP; reimbursable funding makes up about 15% of NRP's total funding. In the past, scientists generally were free to pursue good ideas, with limited feedback to the programs. Program Coordinators are demanding increased accountability. A balance between long-term, high-risk research and directed research must be maintained, but knowing the proper balance is a challenge.

NRP science traditionally has covered a broad range of topics: some fairly esoteric and others that are very application-oriented. Should NRP continue to strive for this mix of research?

NRP scientists are rewarded for publication in the white literature. As a result, there are fewer rewards for publishing "how to" manuals, such as model documentation or Techniques and Methods reports. This creates a challenge in transferring NRP science to the operational program.

The number of RGE scientists in Water Science Centers (about 150) now exceeds the number of RGE scientists in NRP (about 125). However, most RGE scientists in Centers rely on reimbursable funding, which often prevents them from being as productive as NRP scientists. Is there a better way to take advantage of the scientific talent in Water Science Centers?

The NRP remains a key part of the Water Mission Area. The NRP continues to make extremely valuable contributions that allow the Water Mission Area, as well as other mission areas in USGS, to remain at the forefront of earth sciences.

The Leadership Challenge: Develop a strategic vision for the National Research Program for the next 10 years. This vision should include, at a minimum, science directions, hiring priorities, overall management structure, support staff, capital investments, degree of reliance on reimbursable funds, prospective internal and external partners, and potential role of Water Science Center RGE's in the NRP.

Resources

- National Research Council, 2009, *Toward a sustainable and secure water future*: Washington, DC, National Academies Press, 114 p. (hard copies to be distributed). The report discusses the future role of the NRP in the USGS.
- NRP Project Committee Report, 2010, and draft NRP management response (attached). This is a report by NRP scientists about the project structure within NRP. A draft management response also is provided.
- NRP web pages: <http://water.usgs.gov/nrp/>
- NRP Org Charts
- Presentation on status of NRP staff and funding, October 2010.