What are the societal demands and challenges our research needs to address?

"Future Science: a vision for the next 25 years"

Burlington House, London

21-22 February 2017



Societal drivers

- Economic
- Resource provision
- Health
- Quality of life
- Environmental protection



Service to Society (Humankind)

- NZJGG, BW Collins, Geology in the Service of Man 1967
- UNESCO 1962
- Penguin, WG Fearnsides, Geology in the Service of Man, 1961
- Pelican, PGH Boswell, Geology in the Service of Man, 1944
- CUP, WW Watts, Geology in the Service of Man - 1924



Book review in Nature

 (Boswell) NOT so very long ago, the layman who wanted a simply written and up-to-date book on geology would have had to be content with a students' primer not altogether suitable for his needs. Now some half-dozen small volumes, written especially for him, await his choice; and among them this new "Pelican"book takes a high place. The authors have set out to show how geology has been used in the service of man—when he has been wise enough to utilize such knowledge—and have made clear their purpose in writing the book by their introductory note: "It is regrettable that more geologists have not been professionally associated with the war effort; it will be a tragedy if geological knowledge is not coordinated and directly applied in post-war reconstruction"

Who are we?

- Geologist, Geophysicist, Geochemist, Geoscientist
- Earth Scientist
- What is a GEOSCIENTIST? Geoscientists are stewards or caretakers of Earth's resources and environment. They work to understand natural processes on Earth and other planets (Bucknell Univ PA)
- The Four Earth Sciences. Many different sciences are used to learn about the Earth; however, the four basic areas of Earth science study are: geology, meteorology, oceanography, and astronomy. (geology.com)



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geology.com headlines 20-21 Feb 2017

- Eruptions Cause Bogoslof Volcano*s Island to Triple in Size
- New Research Shows How *Atmospheric Rivers* Wreak Havoc Around The Globe
- Satellite Views of Louisiana Tornadoes
- Swirling Eddies in the Antarctic May Have Global Impacts
- Deep Groundwater Aquifers Respond Rapidly to Climate Variability
- Raising Royalties for Coal Mined on Public Lands
- Earthquakes in Lawrence County, PA Linked to Fracking
- As U.S. Shale Activity Surges, Frac Sand Could Be In Short Supply
- Repeated Red Alerts at Bogoslof Volcano
- Thousands of Buildings in Victoria at Risk of Earthquake Destruction
- Mapping 900,000 Active Oil and Gas Wells in the United States
- U.S. Shale Oil Braces for Inflation
- Big Shale Oil Find in Iran
- Enbridge Buys Into One of Europe*s Largest Wind Parks for \$1.7B
- U.S. Deploys Carrier to Contentious South China Sea



For discussion...

Making the most of our relationship with Society



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