

The National Research Program within the Context of USGS Strategic Directions

Leadership 201-August 2011

Champion: Bill Werkheiser, Associate Director for Water

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

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NCTC, Shepherdstown, West Virginia

1. History and Legacy

- NRP has provided intellectual leadership in developing new science in water related issues:
- Started in the 50's
- Era of bell labs/man to the moon
- Responsible for World's most widely used GW model, changing the periodic table, and determining that the Gulf Oil spill cap did not need to be removed when every other agency involved thought it needed to be.

2. Loom Metaphor – to come into view as a massive or distorted image;

- Looming financial crisis
- 2/3 scientists retiring
- Increasing accountability by funding sources

3. Challenge & reframing

- Challenge: Develop a strategic vision for the NRP 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 WSC RGS's in the NRP.
- Reframing: Foster a culture at the NRP that stimulates a focus on the Survey's strategic directions.

Motivating –

- WHY? Scientists do what they want
- We want focus on strategic direction
- Changes staffing – circle of life
- Competition to assign who gets post-docs
- Rewards to incentivize documentation, collaboration,
- Funding competitions

Conclusion –

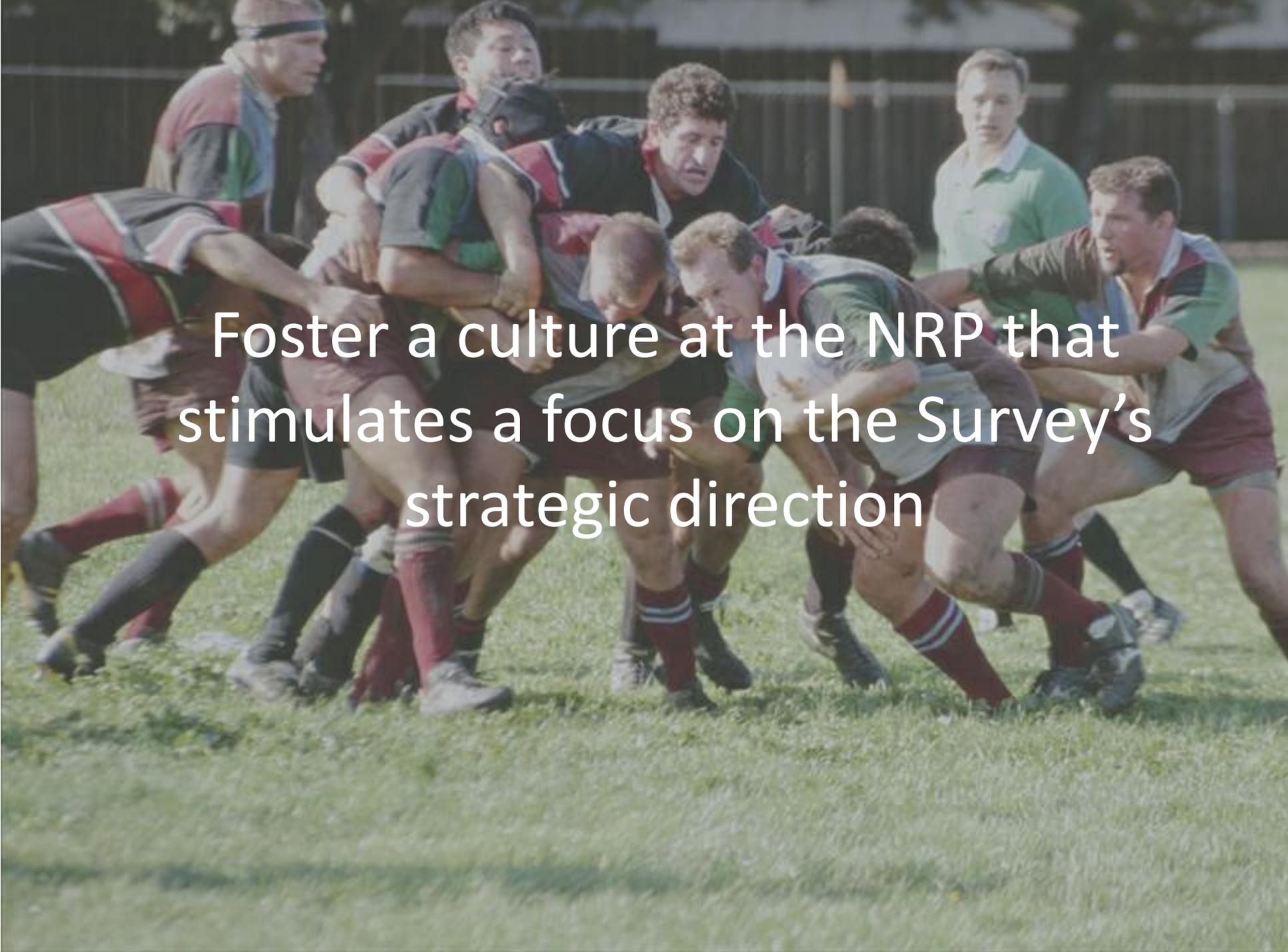
- Right people, right focus,
- 10 years: Functionally flexible, diversely staffed workforce, mission centric, maintaining itself at the tip of the USGS spear





A Strategic Vision for the NRP

- for the next 10 years.
- 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 WSC RGE's in the NRP.

A group of rugby players in a scrum on a grass field. The players are wearing dark jerseys with red and green accents and dark shorts. They are huddled together, pushing against each other. A referee in a green shirt is visible in the background. The text is overlaid on the center of the image.

Foster a culture at the NRP that stimulates a focus on the Survey's strategic direction





**Existing
Researchers**

**Science
Directions**

**Future
Workforce**

Motivation



NRP-Branch

Branch Chief
Kath Prince, Chief, BRR-15 (3210)

Assistant Chief
Candy Brown, Asst. Chief-14 (3220)

Administrative Officer
Casey Tharp, AO-12 (3222)

Science Disciplines

Polaris

IT

Branch Ops
Maria Hernandez, Admin. Ops. Asst-6 (3200)

Jane Meyer, Budget Analyst-11 (3224)

Karen O'Mara, Finance Tech-8 (3200)

Science Support Services
Barbara Eckart, Admin. Ops. Asst.-6 (3200)
Ingrid Sonntag, Admin. Ops. Asst.-6 (3200)

Ecology

Ground Water Chemistry

Ground Water Hydrology

Surface Water Chemistry

Surface Water Hydrology

Geomorphology and Sediment Transport

Joel Fritsch, Master-WM

Scott Conard, Chief Eng.-WM

Arlington Prodigalidad, IT Specialist-12 (3238)

Robert Fronckowiak, IT Specialist-11 (3236)
Chip On, IT Support Tucson

Ecology

Mechanisms of biological and ecological response in disturbed aquatic ecosystems. CH000D3
Jan Thompson, Res. Biol - 14 (2014)

Dan Cain, Res. Biologist-13 (2052)
Robin Stewart, Res. Hydrologist-13 (2028)
Michelle Hornberger, Res. Phys. Sci.-12 (2050)
Jim Carter, Res. Hydrologist-13 (3056)
Steve Fend, Hydrologist-12 (3054)
Francis Parchaso, Biologist-12 (2002)
Marie-Noele Croteau, Res. Biologist-13 (2048)
Jessica Dyke, Hydrologist-9 (2044)
Edward Moreno, Phys. Sci. Tech.-5 (2022)
Jennifer Chiu, Biol. Sci. Tech.
Stacey Andrews (2042)

Biotic Response to Climatic Variability and Human Impacts in Arid Lands. CH000CJ
Julio Betancourt, Res. Hydrologist-ST
Tucson, AZ

D. Kate Aasen Rylander, Biol. Sci. Tech.-9 (Tucson)

Geochemistry and Hydroclimatology of Riverine and Estuarine Waters. CH000DB
Mike Dettinger, Research Hydrologist-15

Iris Frey

Hydroclimate of Riverine and Estuarine Waters
Dan Cayan, Res. Oceanographer-15
San Diego, CA

Lake-Atmosphere Interactions
Steve Hostettler, Res. Hydrologist-15

Ground-Water Chemistry

Partitioning of Solutes Between Solid and Aqueous Phases. 0CQ
Doug Kent, Res. Hydrologist-14 (2074)

Chris Fuller, Res. Hydrologist-15 (2066)

Kathy Akstin, Hydrologist-11 (1089)
Deborah Stoliker, Hydrologist-11 (2068)
Nazila Kaviani, Phys. Scientist-11 (2064)
Patricia Fox

Brine Geochemistry. 0D1
Yousif Kharaka, Res. Hydrologist-15 (1014)

Randal (Burt) Thomas, Res. Hydrologist-12 (3272)
Gil Ambats, Chemist-12 (1006)
Jim Thordsen, Geologist-12 (1010)
Sarah Beers, Hydrologist-7

Geochemistry of Hydrothermal Systems. CH000D5
Bill Evans, Research Chemist-15 (1209)

Mark Huebner, Hydrologist-11 (3066)

Geochemistry of Water/Rock Interaction. 0D7
Tom Bullen, Res. Hydrologist-15 (1095)

Jori Schulz, Res. Hydrologist-12 (1012)
William Fuller

Adjunct and Emeritus
Fran Hostettler (3060)
Allen Moench (1060)
Larry Schemel (3030)
Frank Trieka (3026)
Waite Osterkamp, Tucson
Sam Luoma (2056)
Jim Davis (2076)
Bob Mariner (1245)
Art White (1016)

Ground-Water Hydrology

Environmental Tracers of Surface-Water/ Ground-Water Interactions. 0CM
Jim Constantz, Res. Hydrologist-15 (3034)

Application of Unsaturated-Flow Theory to Ground-Water Recharge and Contaminant Transport
Dave Stonestrom, Res. Hydrologist-14 (1093)

Multiphase Flow, Transport, Reaction and Biodegradation. 0CP
Hedeff Essaid, Res. Hydrologist-14 (3286)

Barbara Bekins, Res. Hydro.-15 (3280)
Gary Curtis, Res. Env. Eng.-13 (3288)
Matthias Kohler, Hydrologist-12 (2070)
Michael Hay, Res. Hydrologist-12 (2072)
Ean Warren, Hydrologist-13 (3024)
Chris Green, Res. Hydro.-12 (3032)
Lixia Liao

Multiphase Flow



**"LEADERSHIP IS THE ART OF GETTING
SOMEONE ELSE TO DO SOMETHING
YOU WANT DONE BECAUSE
HE WANTS TO DO IT."**

- DWIGHT EISENHOWER

**U. S. FISH AND WILDLIFE SERVICE,
ALDP, COHORT III, 2004**



