# A New Vision for Laboratories in the Water Mission Area

June 15, 2012

# Quick Overview

- Problem – USGS lab resources are not optimized
- We will provide:
  - Recommended tasks to address the problem
  - Recommended approach to implement the tasks

DANGER
CONTAMINATED WATER
AVOID WATER CONTACT
FROM THIS POINT SOUTH
TO THE
INTERNATIONAL BORDER
PELIGRO
AGUA CONTAMINADA
ALEJESE
EVITE CONTACTO
CONEL AGUA HASTA
LA LINEA INTERNACIONAL

USGS
USG

CAUTION
CAUTION
CAUTION

# What Does a Successful Laboratory System Look Like?

- The most talented people in the world want to work in our labs
- The system of labs:
  - Uses state of the art equipment;
  - Produces consistent and comparable data of known quality;
  - Works as an efficient system that is flexible and responsive
- USGS has renowned labs of choice
- Sustained financial resources provide for cutting edge production and research capabilities
- The atmosphere promotes innovation

# How Do We Optimize Water Lab Assets Such That They:

- Meet the existing and future needs;
- Quickly respond to changing priorities and demands;
- Provide an environment for cutting edge research

  - in a fiscally sound manner?

# Recommendations/Implementations

**Top Priority Tasks**

Take an inventory of all USGS laboratory capabilities, capacities, and equipment across the Water Mission Area.

Use the inventory results to identify gaps, redundancies, opportunities, assets, and appropriate investments.

# Recommendations/Implementations

**Second Priority Tasks**

Foster communication and coordination among laboratories across the Water Mission Area.

Explore revised lab funding models that ensures stability of all lab functions and sharing of resources.

Document and disseminate standard laboratory procedures and protocols.

# Recommendations/Implementations

**Third Priority Tasks**

Encourage and reward risk-taking and innovation in USGS labs.

Optimize staff and workloads among labs.

Investigate workplace satisfaction programs used elsewhere, and implement the best ideas within the USGS labs.

Periodically survey lab customers to gain feedback on their needs and level of satisfaction.

# Recommendation/Implementations

## Lower Priority Tasks

The laboratory management team would implement ideas to help the USGS system of labs quickly respond to emergencies and short-term priorities.

The laboratory management team would implement ideas to allow the USGS system of labs to coordinate on methods research and development.

Maintain a highly skilled and satisfied workforce of experts.

Evaluate and rebalance WMA lab space in response to national directives, including cost.

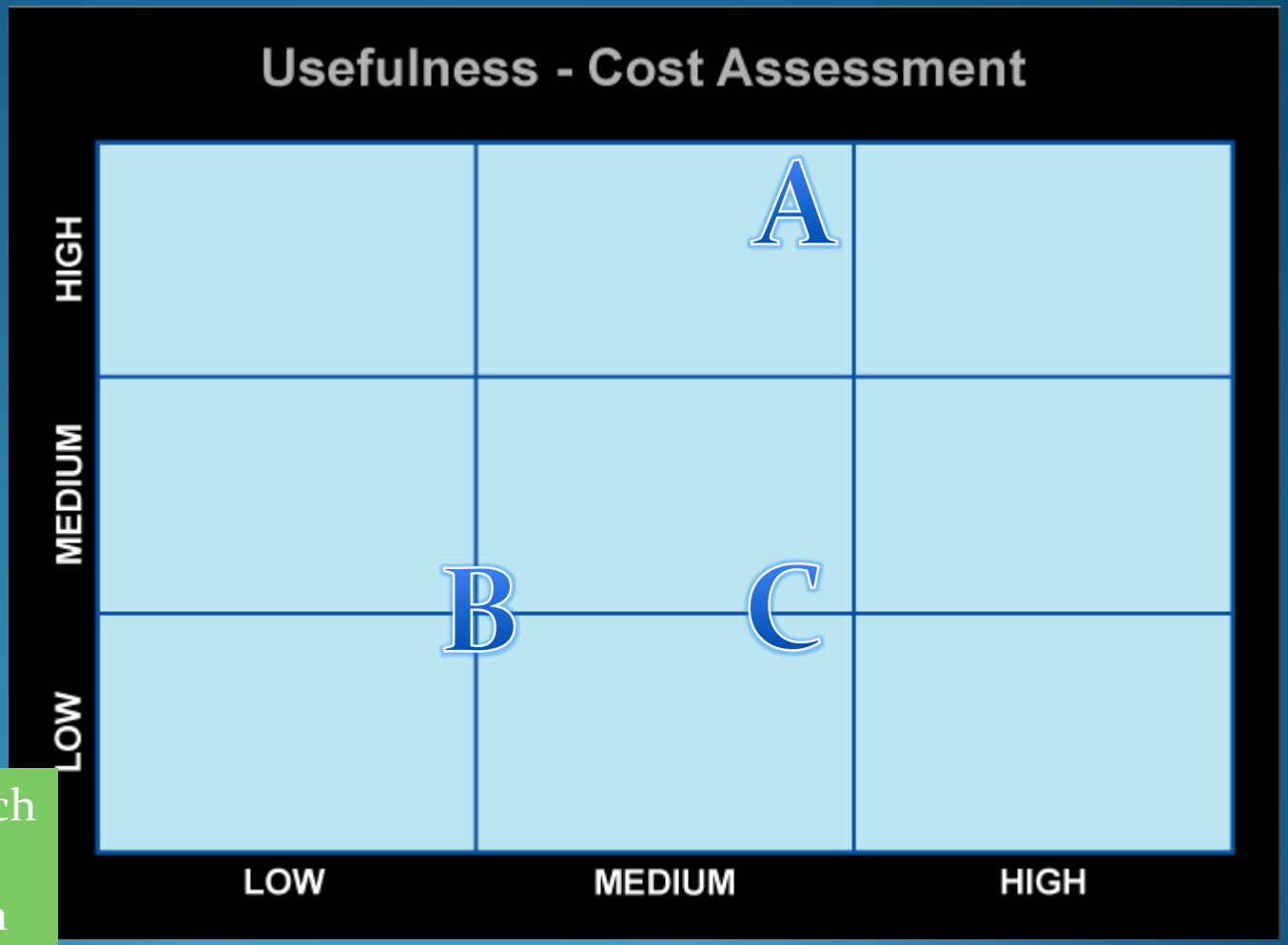
# Implementation Approaches

- Use an internal bottom-up-based team model to make recommendations regarding laboratory management, coordination, and optimization

- As an alternative to an internal bottom-up-based team approach, an internal top-down management model could be applied to make recommendations regarding laboratory management, coordination, and optimization.

- As another alternative team approach, an outside-expert-based management model could be applied to make recommendations regarding laboratory management, coordination, and optimization.

# Comparison of Approaches




**Usefulness:**

**Cost:**

A - Committee Approach

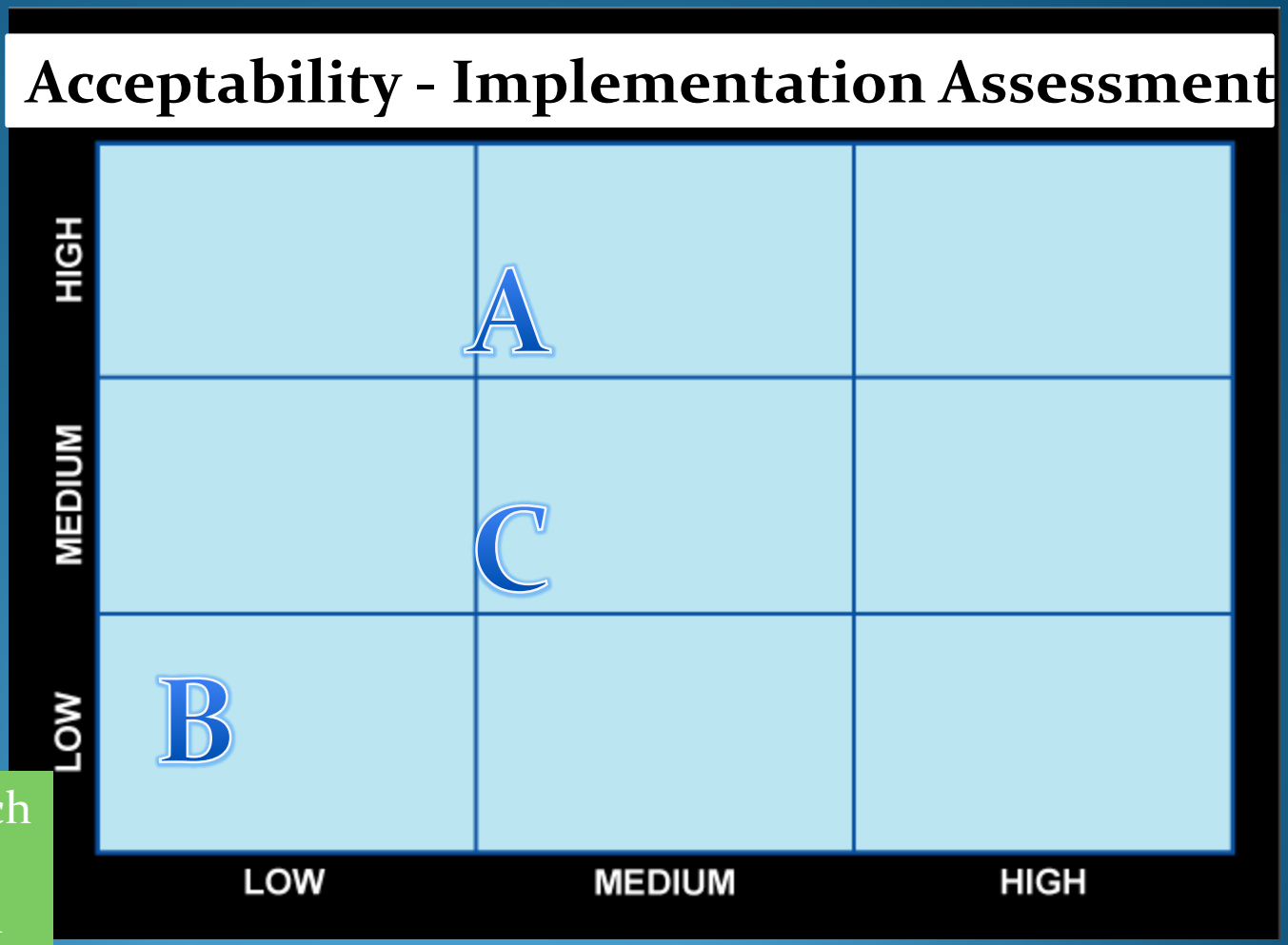
B – Top-Down Decision

C - Outside Consultant

USGS

Modified from: Gryskiewicz and Taylor, 2003

# Comparison of Approaches




**Acceptability:**

**Implementation:**

A - Committee Approach

B – Top-Down Decision

C - Outside Consultant

USGS

Modified from: Gryskiewicz and Taylor, 2003

# Team Coach: Bill Werkheiser

Team Members:

- Matt Pajerowski — Baltimore, MD
- Stewart Rounds — Portland, OR
- Stacy Masters — Carson City, NV
- Carol Giffin — Denver, CO
- Chad Wagner — Raleigh, NC
- Geoff Delin — Denver, CO

# ELT Champions/Sponsors

- Champion:  Bill Werkheiser, Associate Director for Water

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

# Tools Used

- Creative Whack Pack
- Story Telling
- Dictionary
- Polarity Map
- Thinking Hats
- Brainstorming
- Brainwriting
- Converging Grids
- 5 Y's & A How
- What's important for our Recommendation

# Questions?