

# RECLAMATION

*Managing Water in the West*

## Reclamation Meeting on *Managing For Excellence:* Overview of Research and Lab Services Functional Area

Salt Lake City, UT  
September 19-20, 2006



U.S. Department of the Interior  
Bureau of Reclamation

## Background/Drivers

- Reclamation's laboratories are located throughout the agency and represent significant expertise which contribute to core capability
- NRC Report recommended that appropriate location, sizing of Reclamation labs be analyzed concurrently with engineering and design services
- Limited R&D funds must be allocated in the most efficient manner to contribute to mission accomplishment

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## Objectives

- Educate stakeholders on R&D priorities and laboratory services/capabilities
- Ensure efficient use of laboratory services (internal & external)
- Increase return on investment for R&D
- Identify appropriate agency role for future Desal R&D

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## Research & Laboratory Services Action Items

Action Item 32: Identify opportunities for use of Federal/  
non-Federal laboratories

Action Item 33: Identify opportunities for keeping, consolidating,  
eliminating Reclamation laboratories

- Lead: Cliff Pugh, Manager of Water Resource Research  
Laboratory Group, TSC

Action Item 34: Continue PART goal implementation for R&D

Action Item 35: Re-evaluate steering committee to increase core  
mission R&D

Action Item 36: Assess NRC review of desalination R&D

- Lead: Dennis Breitzman, Area Manager, Dakotas Area Office

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## Action Items 32-33: Lab Services

### Tasks

- Assemble data on lab services, workload, and infrastructure costs
- Identify available non-Reclamation lab services and potential for outsourcing
- Identify opportunities for effective staffing resource levels and distribution of lab services within Reclamation

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## Team 32-33 Updates

- Data Collection for Reclamation lab services is nearing completion
- Framework for data review has been formulated and the team is processing the data and refining the information
- Activities reflect the individual business models for the lab services
- Activities focus on the data needed for team 12 right sizing activities

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## Categories Laboratory Services

- Laboratory Services fall into two distinct categories:
  - Standardized testing- Tests performed according to national standards to determine parameters such as water quality and material properties.
  - Specialized testing- Custom designed laboratory experiments conducted to develop solutions to unique issues related to water and power.
    - Examples of specialized testing include physical hydraulic models and electrical test equipment designed to examine performance of power systems.

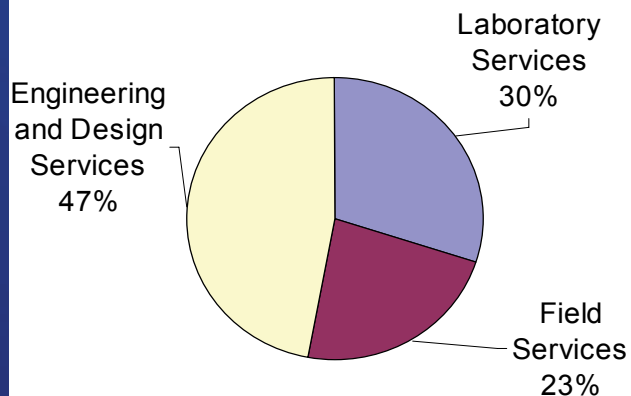
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## Assessing Technical Workload

- Data Collection - We are collecting data on lab work being conducted by Reclamation laboratories and by contract labs.
- Role of Laboratory Services - Laboratory services are only a portion of the work performed by the groups that operate specialized laboratories.
- Engineering and Design Services - including environmental assessments, training, field services, technical consultation, etc. are actually the majority of the work performed in these groups.
- Purpose of Lab Services - The laboratories provide services for various purposes throughout Reclamation- as shown on the following slide.

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## Types of Services Provided by Laboratory Groups (Preliminary Data - FY 2005)



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## Action Items 34-35: R&D

### Tasks

- Assess federal and non-federal state of the science and future challenges in water resources
- Evaluate effective integration of Science & Technology (S&T) program into Reclamation mainstream mission
- Develop framework for effective S&T/R&D integration

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## Team 34-35 Identified Areas of Improvement

- Regional and Reclamation wide S&T knowledge gap which challenge Reclamation's mission
- Tracking of technology emerging from public and private efforts external to Reclamation
- Integration across Reclamation in R&D and deployment of successful solutions, best practices, and new knowledge
- Outreach and collaboration with project beneficiaries and other stakeholders
- R&D partnership building with national , regional and local research organizations
- Links to universities that offer unique opportunities to leverage scientific expertise and build relationships

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## Team 34-35 Actions

- Analysis of organizational alternatives to achieve program improvements
- Continue program efforts to measure additional water supply provided, reductions in costs, and or additional power generated by application of solutions developed by R&D Program
- Continue development of Water and Power Solution Bulletins

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