

# RECLAMATION

*Managing Water in the West*

## ***Managing for Excellence*** **Concept Paper**

## **Functional Area: Research and Laboratory Services**

*Executive Sponsor*

**David Achterberg, Director, Safety, Security, and Law Enforcement**





## **Background/Drivers**

In the early 2000's, Reclamation instituted an agency-wide, cost-sharing, competition-based internal Research and Development (R&D) program. R&D funds are currently awarded based upon established Bureau-wide schedules, priorities, and peer review processes. The agency will invest in R&D consistent with core mission priorities and to address key emerging scientific and technical challenges.

The R&D Office is managed by a Director of R&D, consistent with the administration's R&D Investment Criteria. A Science and Technology (S&T) Program Steering Committee provides advice on priority areas. The Steering Committee has membership from throughout the agency as well as from other agencies, universities, and water districts. In addition, Regional Research Coordinators and reviewers throughout Reclamation provide recommendations relative to specific research proposals.

The R&D Office does not manage the laboratory services. Historically, technical capabilities and laboratories were both located within the Division of Research. However, when the Denver organization was changed from the Engineering and Research Center to the Technical Service Center (TSC), that relationship changed. Currently, programmatic responsibility for these two activities is lodged separately, with research managed by the Office of Science and Technology and the laboratory facilities managed by the TSC. There are also a few labs located within some regional and area offices. However, these action items have been grouped together and will examine further improvements to the R&D funding process, as well as the most effective way to obtain Reclamation's laboratory services needs.

## **Improvements to R&D Process**

The team responsible for Action Items 34-35 has two objectives. The first is to evaluate, and either redefine or validate the Steering Committee's role in seeing that Reclamation's mission related R&D needs are met. The second objective is to formulate a plan to accomplish Program Assessment Rating Tool (PART) goals for R&D, which are: (1) produce a 10:1 return on investment, (2) increase non-Reclamation cost-sharing, and (3) improve technology/information transfer.

Team 35 has prepared a revised charter for the S&T steering committee with consideration for improving the committee's transparency and accountability. The charter was posted to the draft products for review in January 2007. Team 34 gave an overview of its activities at Reclamation's public meeting in September and will complete its report detailing recommendations for improving the Science and Technology Program in February, 2007.

## **Sizing, Location, and/or Outsourcing of Lab Services**

The team responsible for Action Items 32-33 has identified the scope of current lab services being performed within Reclamation as well as the agency's current and future needs for these services. The team examined the current funding sources/business models for these labs. Data has been collected and a draft report was prepared for review. The results of the teams' analysis were presented at Reclamation's public meeting in Sacramento, November 2006.

Based on the understanding gained regarding the workload and potential for outsourcing, as well as the role of Reclamation's specialized labs in maintaining core capabilities within the agency, the team has proposed opportunities for retaining, consolidating, eliminating, and or outsourcing the labs. These proposals aim to support the design, research, planning, estimating and construction management activities critical to the success of Reclamation's mission in the most efficient manner possible. An implementation plan will be developed to achieve the appropriate resource staffing levels and distribution of lab services within Reclamation. The team is expected to present its results at the public meeting in February 2007. For an outline of the objectives, tasks, and milestones for Team 32-33, please see the attached Action Item Summary.

## **Relationship to other Functional Areas**

The recommendations from Team 32-33 regarding sizing, location, and/or outsourcing of Reclamation's laboratory services will be a direct input into the rightsizing process being accomplished by the teams responsible for Action Items 9 – 12 in the Engineering and Design Services area. Stakeholders interested in the rightsizing process are encouraged to give input to the work of Team 32-33.

### **Action Item 32**

**Determine where opportunities exist for use of federal and non-federal lab services.**

### **Action Item 33**

**Determine where opportunities exist for retaining, consolidating and/or eliminating lab services within the TSC and regions.**

**Team Lead:** Clifford Pugh, Manager, Water Resources Research Laboratory (WRRL), Technical Service Center

#### **Team Members:**

- Monte McClendon, Ecosystems Analysis Program Manager, Pacific Northwest Region
- Pablo Arroyave, Deputy Area Manager, Lahontan Basin Area Office, Mid-Pacific Region
- Mike Norris, Research Coordinator, Yuma Area Office, Lower Colorado Region
- Angela Adams (support), Yuma Area Office, Lower Colorado Region
- Nathan Myers, Electrical Engineer, Hydroelectric Research and Technical Services Group, Technical Service Center
- Bill Kepler, Materials Engineering and Research Laboratory Group, Technical Service Center
- Tony Wahl (support), Hydraulic Engineer, Water Resources Research Laboratory, Technical Service Center
- John LaBoon, Manager, Waterways and Concrete Dams Group, Technical Service Center

#### **Objectives:**

- Identify existing Reclamation lab services, the scope of current lab services being performed, and clients for those services
- Propose opportunities for retaining, consolidating, eliminating, and or outsourcing lab services in a manner that most effectively supports the design, research, planning, cost estimating and construction management activities critical to the success of Reclamation's mission. An implementation plan will be developed to achieve the appropriate resource staffing levels and distribution of lab services within Reclamation

#### **Tasks:**

- Depict the current array of lab services in terms of:
  - Purpose - Design support, Infrastructure O&M Support, Applied Research, Operational Decision Support
  - Capability - (e.g. hydraulic modeling, environmental services, rock mechanics, water quality analysis, GIS, electrical infrastructure services, material engineering services)
  - Location of lab service provider (e.g. UC Region, Great Plains Region, TSC, IDIQ contract, etc.)

## **Action Items 32-33 (cont.)**

### **Tasks (cont.):**

- Depict the current workload profile (based on past 3 years) for each lab service identified above:
  - Customer (e.g. UC Power Program, Dam Safety Program, Research Program, Area Office, Regional Office, Non-Reclamation, etc.)
  - Costing category
- Adjust the workload profile to depict the future anticipated workload
- Identify potential non-Reclamation sources for each lab service
- Identify opportunities for outsourcing to accomplish projected workload
- Propose alternatives for the most effective distribution of in-house lab services within Reclamation
- Propose an implementation plan to achieve the appropriate resource staffing levels and distribution of lab services within the agency

### **Milestones:**

- July 2006: Interface with the stakeholders at this point in the process to give them the opportunity to identify whether or not the data are appropriate from their perspective.
- August 2006: Inventory of potential non-Reclamation laboratory service providers.
- September 2006: Interface with the stakeholders to give them the opportunity to provide input to the team prior to firming up recommendations.
- November 2006: Develop implementation plan
- December 2006: Submit implementation plan for review and approval
- January 2007: Submit decision document

### **Products:**

- Final report detailing proposals for lab services to be outsourced vs. retained in-house, and the appropriate distribution within Reclamation.
- Recommended Implementation Plan for consolidation of laboratories Reclamation wide.

### **Action Item 34**

**Continue implementation of PART goals for R&D: produce a 10:1 return on program R&D investment; Increase partnership cost-share; Increase Technology Transfer.**

**Team Lead:** Dennis Breitzman, Manager Dakotas Area Office

**Team Members:**

- Karl Wirkus, Deputy Regional Director
- John Johnson, Lower Colorado Regional Office
- Chuck Hennig, Manager of Research & Development

**Objective:**

- Formulate a plan to accomplish OMB's PART goals for research and development. Those goals are:
  - produce a 10:1 return on R&D investments,
  - increase non-Reclamation cost-sharing, and
  - improve technology/information transfer.

**Tasks:**

- Review history and current status of Reclamation's R&D program
- Review other agencies' approach to R&D; consider input from both internal and external customers
- Consider Administration policies and directives relative to R&D.
- Reviewed PART analysis within the Reclamation program
- Evaluated existing communication tools.

**Milestones:**

- A draft report has received internal review as well as some executive level review
- December 2006: Discussions with individual stakeholders
- January 2007: team meeting scheduled
- January 2007: final report submitted to the Reclamation Leadership Team

**Products:**

- Report with recommendations for improving the efficiency, transparency and accountability of the Science & Technology Program.

## **Action Item 35**

**Re-evaluate the Science & Technology Program Steering Committee's charge to increase opportunities to meet mission core Research & Design needs in the future.**

**Team Lead:** Dennis Breitzman, Manager Dakotas Area Office

**Team Members:**

- Karl Wirkus, Deputy Regional Director
- John Johnson, Lower Colorado Regional Office
- Chuck Hennig, Manager of Research & Development

**Objective:**

- To review and either redefine or validate the existing R&D Steering Committee's role in seeing that Reclamation's core-mission related R&D needs are met.

**Tasks:**

- Review history and current status of both Reclamation's R&D program and the role of the R&D Steering Committee
- Review other agencies' approach to R&D
- Consider Administration policies and directives relative to R&D.
- Consider stakeholder involvement and incorporate their suggestions

**Milestones:**

- December 2006: recommended team charter reviewed at the executive level and submitted to the Reclamation Leadership Team.

**Products:**

A team charter for a Science and Technology Team which will replace the Steering Committee. (If you would like to provide comments on any draft products, visit the [Draft Products](#) page.). The Charter describes six specific areas for improvement and increased transparency in that the meeting summaries will be posted to the Reclamation website.