

RECLAMATION

Managing Water in the West

**Reclamation Meeting on
Managing For Excellence
Breakout Session: Water O&M
Benchmarking**

July 10-11, 2006

Las Vegas, NV



U.S. Department of the Interior
Bureau of Reclamation

Asset Sustainment

Objectives:

- Reclamation will perform a thorough analysis of how its infrastructure will be managed
 - Physical and engineering
 - Economic
- Greatest efficiencies to be gained in this area

Action Item 31: Water O&M Benchmarking

Outline:

- Background
- Tasks
- Progress to Date
- Proposed Scope of Effort
- Proposed Performance Metrics
- Next Steps
- Schedule / Deliverables

Action Item 31: Water O&M Benchmarking

Background:

- **NRC Report Finding 5c stated that:**
“...benchmarking can help improve the efficiency of Reclamation’s water management and distribution activities as well as those of the water contractors responsible for transferred works.”
- **NRC Report Recommendation 5c stated that:**
“Benchmarking of water distribution and irrigation activities by Reclamation and its contractors should be a regular part of their ongoing activities.”

Action Item 31: Water O&M Benchmarking

Background:

- Reclamation's *Managing for Excellence* Action Plan included the following action item:
 - “Benchmark O&M of water storage and distribution facilities in a manner modeled after current practices with power facilities, starting with pilot program.”

Action Item 31: Water O&M Benchmarking

Background:

- **Initiated a successful power benchmarking study in the 1990's**
- **Attempted a water O&M benchmarking effort in 1999 / 2000, but had very limited interest from external partners**

Action Item 31: Water O&M Benchmarking

Tasks:

- Conduct literature search on past water O&M benchmarking efforts
- Propose scope of effort and performance metrics for this study
- Seek stakeholder input/feedback on scope/metrics
- Seek benchmarking partners
- Scope extent of pilot program
- Collect and analyze data (use contracted services, if needed)
- Produce draft report
- Peer review of draft report
- Conduct internal/external review of final draft report
- Finalize report and distribute

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Progress to Date:

- **Researched and documented past benchmarking efforts/information**
- **Identified proposed scope and performance metrics**
- **Developed white paper on proposed scope and performance metrics**

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Proposed Scope of Effort – Issue 1

- **Limit benchmarking to reserved works' storage dams**
 - **Driving issue related to O&M costs**
 - **Focus on those multipurpose project facilities where beneficiaries are required to reimburse portion of O&M (irrigation and M&I)**

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Proposed Scope of Effort – Issue 2

- **Non-inclusion of carriage and conveyance features**
 - The term “distribution” used in the reports is assumed to refer to the delivery features associated with storage dams (i.e., river and canal outlet works) and not to downstream carriage and conveyance features
 - Essentially all carriage and conveyance features are transferred works (O&M is performed and funded by a water user entity)

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Proposed Scope of Effort – Issue 3

- **Internal benchmarking**
 - Potential benefit of identifying cost saving procedures within Reclamation
 - Internal benchmarking of reserved works storage dams to be a focus area

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Proposed Scope of Effort – Issue 4

- Partnering with transferred works' operating entities
 - Potential benefit of comparing O&M costs between reserved works' and transferred works' storage dams
 - Benchmarking effort to invite participation by operating entities of transferred works

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Proposed Performance Metrics* (what data to compare)

- Total costs to O&M storage dams (indirect and direct)
- Direct costs to O&M storage dams
- Indirect costs as a % of total costs
- Contract costs as a % of total costs
- Number of FTEs to O&M storage dams
- Reliability ratings for storage dams, or some other measure of O&M condition
- Quality/level of dam operator training

*all costs to be considered on an annual basis.

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Next Steps:

- Finalize scope of work (w/stakeholder input)
- Determine availability of willing partners and data
- Determine if contracting of services is needed (and, if available)
- Determine extent of pilot program

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Next Steps:

- **Extent of pilot program based upon:**
 - **Numbers of partners and types of dams participating**
 - **Types of dam groupings**
 - **Relative size of dam**
 - **Has irrigation or M&I component**
 - **Gated or non-gated spillway**
 - **Construction type**
 - **Powerplant associated with dam**
 - **Availability of good “apples to apples” comparisons**

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Schedule/Deliverables: (dates are tentative)

- **July - September 2006: Seek benchmarking partners**
- **October 2006: Scope pilot program**
- **November 2006 – February 2007: Collect and analyze data (gap analysis)**

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Schedule/Deliverables: (dates are tentative)

- **March 2007: Produce draft report based on analyses**
- **April 2007: Peer review of draft report**
- **May 2007: Broad internal/external review of final draft report**
- **June 2007: Final report completed and distributed**

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- Questions
- Feedback/input on scope of effort and performance metrics
- Possible partners for benchmarking pilot program