

RECLAMATION

Managing Water in the West

Managing for Excellence

An Action Plan for the 21st Century
Bureau of Reclamation



U.S. Department of the Interior
Bureau of Reclamation

Managing for Excellence

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Executive Summary

A History of Change

The Bureau of Reclamation's history of accomplishment includes marvels of engineering and construction which supply critical water and power to the now-vibrant Western United States. While these Reclamation structures stand as icons of rock-solid stability and constancy, the agency itself has, from its inception, experienced constant change.

It is time for Reclamation to change again. To be adequately prepared for the challenges of the 21st Century, it is essential that Reclamation thoroughly examines its core capabilities in a number of key areas, as well as its ability to respond in an innovative and timely manner to future needs. Reclamation is committed to a thorough evaluation and the change that will come from it. This effort is a significant opportunity to position Reclamation for excellence in managing its future as a citizen-centered agency that delivers optimum value to its stakeholders. The Reclamation community recognizes the need for change and the employees are fully capable of carrying it out.

Managing for Excellence

An important catalyst for this evaluation effort is the recently published National Research Council Report, "Managing Construction and Infrastructure in the 21st Century Bureau of Reclamation" (NRC Report), which examines several facets of Reclamation's organization, practices, and culture. In accordance with direction from Deputy Secretary Lynn Scarlett, each of the NRC Report's recommendations is addressed in this *Managing for Excellence* Action Plan.

Other equally important sources that have contributed to the formation of this action plan and will guide the implementation of it include: Reclamation's 2004 *Customer Satisfaction Survey*; *The Bureau of Reclamation's Capability to Fulfill Its Core Mission: The Customer's Perspective* (Family Farm Alliance, June 2005); *The Future of the Bureau of Reclamation: A White Paper* (Don Glaser and Joe Hall, 1999); and various Reclamation-produced reports, informal reviews, evaluations, and lessons learned by Reclamation's management team.

This *Managing for Excellence* Action Plan outlines a process and timeframe for identifying and addressing the specific 21st Century challenges Reclamation must meet to fulfill its mission: managing, developing, and protecting water and related resources in an environmentally and economically sound manner in the interest of the American public. The plan complements other ongoing evaluation and improvement efforts, such as the President's Management Initiative, the Office of Management and Budget's Program Assessment Rating Tool exercises, and Federal Enterprise Architecture blueprinting exercises. *Managing for Excellence* focuses on managing issues and challenges, existing infrastructure, and future construction.

Reclamation has used crucial input from employees, customers and other stakeholders in preparing the *Managing for Excellence* Action Plan for Secretary Norton. More extensive input will be sought and considered in implementing the 41 individual action

items in this Action Plan, with all action items to be completed by December 2007. One of the initial products of each team or group assigned to accomplish an action item from this Action Plan will be a detailed outreach plan.

Managing Issues and Challenges

Reclamation's ability to manage unique water and power development challenges has contributed significantly to the development of the West during the past century, but future growth in the West will continue to put significant pressure on available supplies. As competition for these scarce resources increases, against a backdrop of significant budgetary constraints, it is critical that we maintain and strengthen our capability to work with our many stakeholders in effectively meeting current and future water and power resources challenges in the Reclamation States. To ensure this capability during the 21st Century, Reclamation will carefully examine four broad functional areas to identify and successfully implement needed changes or improvements. These areas include:

- Relationships With Customers and Other Stakeholders
- Agency-Wide Policies
- Research and Laboratory Services
- Human Resources/Workforce

The principles and benchmarks most applicable to the evaluation of needs in managing issues and challenges are: (1) improvement of the management and leadership processes, applications, responsibilities, and outcomes in all Reclamation activities in order to effectively respond to future needs and challenges; (2) attaining a synergistic balance of centralized policy and decentralized operations; and (3) application of the Secretary's 4C's strategies (conservation through communication, consultation and cooperation) to help multiple stakeholders combine perspectives in problem-solving efforts.

Managing Existing Infrastructure

To ensure the effective management of its infrastructure in the public interest, Reclamation will thoroughly examine the following broad functional areas to identify and implement needed managerial and operational improvements:

- Engineering and Design Services
- Major Repair Challenges
- Asset Sustainment
- Lab Support
- Human Resources/Workforce

The principles and benchmarks most applicable to the evaluation of needs in managing existing infrastructure are: (1) appropriate definition of Reclamation's stewardship responsibility as the owner of federal facilities; (2) determination of the appropriate level of core capability necessary for flexible and innovative fulfillment of mission requirements, including the appropriate organizational location of that capability; and (3) transparency and value of construction and O&M costs.

Managing Future Construction

Evaluation of a number of broad functional areas is critical to understanding how to achieve and maintain the appropriate level of construction management capability necessary for Reclamation to fulfill its mission in the 21st Century. These areas include:

- Engineering and Design Services
- Project Management
- Lab Support
- Human Resources

The principles and benchmarks most applicable to the evaluation of needs in managing future construction are: (1) determination of the appropriate level and organizational location of core capability necessary for flexible and innovative fulfillment of mission requirements; and (2) transparency and value of construction and O&M costs.

Description of Functional Areas and Action Items

As noted in each of the preceding sections, there are a number of major functional areas within which Reclamation's work can be categorized. These areas are:

- Relationships with Customers and Other Stakeholders
- Policies and Organization
- Engineering and Design Services
- Major Repair Challenges
- Project Management
- Asset Sustainment
- Research and Laboratory Services
- Human Resources/Workforce

For these eight functional areas, the *Managing for Excellence* Action Plan includes 41 specific action items to address how Reclamation will meet the challenges described in the preceding sections. Each of these action items will be accomplished following a similar course, which will include:

- assigning the task to the appropriate person/entity;
- defining the task;
- analysis of the issues/problems;
- development of alternatives and recommendations; and
- decision making.

Reclamation's senior management will begin implementation of the *Managing for Excellence* Action Plan by assigning each of the action items to an appropriate organization or informal team within the agency which will perform the task definition, analysis, and alternative development portions of the action.

Upon appointment by senior management, each entity will organize their efforts to address the action item assigned them. This will include a budget estimate, framing of the issue, milestones and deadlines, and an outreach plan.

It is expected that budget for this effort will come almost exclusively from previously appropriated dollars. While the total effort is expected to require staff time, travel costs, and contracted work totaling approximately \$10 million, this will primarily be accomplished by reprioritizing the use of these existing resources.

As part of defining the task for its action item and organizing efforts to accomplish it, one of the initial products of the assigned entity will be a detailed outreach plan. The outreach plan will include a discussion of the appropriate level and scope of communication, consultation and collaboration with customers and other stakeholders throughout the entire process. That process will consist of defining the task, analyzing the issues, developing alternatives, and making decisions, with detailed plans regarding how this will be accomplished.

The action items for each of the eight major functional areas are detailed in the *Managing for Excellence* Action Plan. Work on the implementation phase of this effort will commence upon concurrence by the Secretary in this Action Plan, and all action items are scheduled to be completed by December 2007.

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Managing for Excellence

An Action Plan for the 21st Century Bureau of Reclamation

Introduction

A History of Change

Reclamation's history of accomplishment includes marvels of engineering and construction which supply critical water and power to the now-vibrant Western United States. While these Reclamation structures stand as icons of rock-solid stability and constancy, the agency itself has, from its inception, experienced constant change.

The period from 1902 to 1924 was a time of horse-drawn fresnos and contracts with individual homesteaders for irrigation water. Power generation was only beginning, but rapidly grew as a major purpose in later years. The Fact Finders Act of 1924 initiated the transition in the relationship between Reclamation and water user organizations to the one that exists today. Under the terms of this act and the contracts written pursuant to it, water user organizations assumed greater authority and responsibility for construction cost assessments and to operate and maintain (O&M) facilities. The 1939 Reclamation Projects Act established additional contracting requirements and provided for greater consistency in the planning, execution, and operation of Reclamation projects, including the incorporation of multiple project purposes. Legislation in the 1940s and 1950s recognized and compensated for the general public benefits generated by Reclamation projects. Two other developments of the 1940s and 1950s era – the aging of Reclamation's infrastructure, and the growing engineering and construction capabilities of many local governments and water user organizations – were recognized and addressed with legislation: the Rehabilitation and Betterment Act of 1949 and the Small Reclamation Projects Act of 1956.

The failure of Teton Dam in 1976 resulted in legislation and organizational changes that altered Reclamation's approach to dam safety. The Water Resources Development Act of 1974 established uniform rules for project planning and justification. In the last 30 years, the increased capabilities of non-federal organizations in the West, along with changing public attitudes regarding agricultural subsidies and environmental issues, significantly diminished the demand for large federal water and power projects. In 1993, a major reorganization of the agency decentralized Reclamation operations and flattened the organization, with the goal of changing the agency's focus from one of water and power development to water and power resource management. All the changes in Reclamation's operations and strategic focus during the previous century were made to serve the changing needs and values of the American public.

Managing for Excellence

It is time for Reclamation to change again. To be adequately prepared for the challenges of the 21st Century, it is essential that Reclamation thoroughly examine its core capabilities in a number of key areas, as well as the agency's ability to respond in an innovative and timely manner to both expected and unforeseeable future needs.

Reclamation is committed to a thorough evaluation and the change that will come from it. This effort is a significant opportunity to position Reclamation for excellence in managing its future as a citizen-centered agency that delivers optimum value to its stakeholders. The Reclamation community recognizes the need for change and the employees are fully capable of carrying it out.

An important catalyst for this evaluation effort is the recently published National Research Council Report, “Managing Construction and Infrastructure in the 21st Century Bureau of Reclamation” (NRC Report), which examines several facets of Reclamation’s organization, practices, and culture. In accordance with direction from Deputy Secretary Lynn Scarlett, each of the NRC Report’s recommendations is addressed in this *Managing for Excellence* Action Plan.

Other equally important sources that have contributed to the formation of this action plan and will help guide the implementation of it include:

- Reclamation’s 2004 *Customer Satisfaction Survey*;
- *The Bureau of Reclamation’s Capability to Fulfill Its Core Mission: The Customer’s Perspective* (Family Farm Alliance, June 2005)
- *The Future of the Bureau of Reclamation: A White Paper* (Don Glaser and Joe Hall, 1999).
- Various Reclamation-produced reports:
 - *Construction Management in the Bureau of Reclamation: The Next 25 years*. November, 2004.
 - *Review of Decision Making In Reclamation*. October 2004
 - *Animas-La Plata Construction Cost Estimates*. November 2003.
- Informal reviews, evaluations, and lessons learned by Reclamation’s Leadership Team.

The above sources and informal feedback from many Reclamation stakeholders lead us to focus our attention on the following underlying principles and benchmarks that guide this *Managing for Excellence* Action Plan:

- improvement of the management and leadership processes, applications, responsibilities, and outcomes in all Reclamation activities to effectively respond to future needs and challenges;
- attaining a synergistic balance of centralized policy development (Reclamation Manual) and decentralized operations;
- determination of the appropriate level and organizational location of core capability necessary for mission fulfillment;
- definition of Reclamation’s stewardship responsibility as the owner of federal facilities;
- application of the Secretary’s 4C’s strategies (conservation through communication, consultation and cooperation) to help multiple stakeholders combine perspectives in problem-solving efforts; and
- transparency and value of construction and O&M costs.

Based on these principles and benchmarks, and guided by the information gained from the recent studies and analyses cited in this section, this Action Plan outlines a process and timeframe for identifying and addressing the specific 21st Century challenges Reclamation must meet to fulfill its mission: managing, developing, and protecting water and related resources in an environmentally and economically sound manner in the interest of the American public. This Action Plan complements other ongoing evaluation and improvement efforts, such as the President's Management Initiative, Office of Management and Budget Program Assessment Rating Tool exercises, and Federal Enterprise Architecture blueprinting exercises. This Action Plan focuses on managing issues and challenges, existing infrastructure, and future construction.

Feedback and Communication Mechanisms

Managing for Excellence will feature crucial input from customers and other stakeholders in each of two major phases:

- Preparation of this Action Plan for Secretary Norton by February 28, 2006.
- Accomplishment of individual action items in this Action Plan, with all action items to be completed by December 2007.

During this first phase of *Managing for Excellence*, customers and other stakeholders have contributed invaluable suggestions on the scope of action items for further study and future implementation. Most of these suggestions came via national member organizations. Additional input was provided by Reclamation managers and employees, Congressional staff, and other federal agencies.

During the second phase, more extensive and detailed stakeholder and employee input will be sought and considered. One of the initial products of each team or group assigned to accomplish an action item from this Action Plan will be a detailed outreach plan. The outreach plan will include a discussion of the appropriate level and scope of communication, consultation and collaboration with customers and other stakeholders throughout the entire process. That process consists of defining the task, analyzing the issues, developing alternatives, and making decisions, with detailed steps on how this will be accomplished.

While some of the action items in phase two, by their statutory or regulatory nature, may not lend themselves to direct input from customers and other stakeholders, the majority of them will. Where stakeholder input is appropriate, it will be characterized by robust communication, consultation, and collaboration. However, outreach will necessarily stop short of management abdication or delegation of inherently governmental functions, such as those performed by contracting officers.

Managing Issues and Challenges

Functional Areas to be Evaluated

Reclamation's ability to manage unique water and power development challenges has contributed significantly to the development of the West during the past century. As discussed in the NRC Report, future growth in the West is expected to put significant pressure on available supplies. As competition for these scarce resources increases, against a backdrop of significant budgetary constraints, it is critical that Reclamation maintain and strengthen its capability to work with the many stakeholders involved in effectively meeting current and future challenges of developing and managing water and power resources in the seventeen Reclamation States.

To ensure this capability during the 21st Century, Reclamation will thoroughly examine four broad functional areas to identify and successfully implement needed changes or improvements. These areas include:

- Relationships With Customers and Other Stakeholders
- Agency-Wide Policies (i.e., Reclamation Manual documents)
- Research and Laboratory Services
- Human Resources/Workforce

Principles and Benchmarks

The principles and benchmarks most applicable to the evaluation of needs in managing issues and challenges are: (1) improvement of the management and leadership processes, applications, responsibilities, and outcomes in all Reclamation activities in order to effectively respond to future needs and challenges; (2) attaining a synergistic balance of centralized policy development (Reclamation Manual documents) and decentralized operations; and (3) application of the Secretary's 4C's strategies to help multiple stakeholders combine perspectives in problem-solving efforts.

1). Improvement of the management and leadership processes, applications, responsibilities, and outcomes in all Reclamation activities to effectively respond to future needs and challenges. Management in Reclamation is at the heart of this Action Plan. Reclamation's current challenge is to ensure that its management approaches deal with the right issues, focus the organization on the most important topics, move the organization to resolve the most difficult issues, and are open and transparent to its customers.

Effective management is more than developing a sound relationship with customers, clear establishment of agency-wide policies, and ensuring the quality and readiness of the workforce. Management involves achievement of outcomes. It involves leadership and direction for employees. It involves collecting the data, honoring the data, and making the decisions. To position Reclamation for the future requires the examination of the management, leadership, and decision making processes that exist, and the assessment of how well they are meeting the contemporary needs of Reclamation and its customers. This examination will be difficult, but necessary. It will require a critical assessment of

practices, policies, and approaches, as well as a Reclamation-wide commitment to implement any needed change. To look at managing the issues and challenges, existing infrastructure, and future construction, Reclamation must look at the foundation of its management approach and determine whether it is appropriate for the 21st Century.

Decision making is an important aspect of management in Reclamation,, and represents one of the areas where current and future challenges demand that the agency re-examines its methods, from strategic policy decisions at the highest levels to individual, project specific decisions. As such, it merits the more detailed discussion that follows.

During most of the 20th Century, Reclamation made its water resources decisions using a very structured process. As Reclamation became less involved in planning and constructing large-scale projects, this decision making structure came to be viewed by many as overly rigid and lacking in value to the customer. Driving this perception were problems such as the cost overruns that occurred in the early 1990s on the Hoover Dam Visitor Center. These occurred even though there were several layers of review and approval of the project. Experiences such as these were among the motivating factors behind the 1993 Reorganization, which resulted in the decentralization of authority in the agency, the sunseting of the Reclamation Instructions, and the shift in roles of the various organizations in Denver from an oversight or approval function to one of service provider.

The flexibility and empowerment resulting from Reclamation's decentralization efforts in the early 1990s were enthusiastically embraced and yielded benefits. The full effects of these changes were not immediately felt, because of the significant institutional knowledge and understanding possessed by Reclamation executives, managers and staff at that time. However, as many of these employees left and were replaced, the significant loss of structure in the decision making process, coupled with insufficient clarity of roles and responsibilities began to have consequences that often led to both inefficiency and inconsistency. Examples include decisions being revisited or revised as issues were elevated by dissatisfied stakeholders. When individual decisions have been elevated on a random basis, the decision making has taken on an ad-hoc quality. Even when good decisions do result from such a process, their ad-hoc nature can prevent them from being systematically communicated across the agency. While the historic model may have included some processes rendered unnecessary and inefficient in Reclamation's current environment, it did provide a clearer understanding to employees, customers and other stakeholders of the decision-making process that they would have to undertake in order to reach the implementation phase. In areas such as water contracting and the Safety of Dams Program, where Reclamation merely streamlined rather than eliminated formal processes, fewer problems and surprises have occurred because the parties involved better understand their specific roles and responsibilities associated with decision making in these areas. As Reclamation's senior management has revisited these leadership issues, it has often referred back to the activities of water contracting and Safety of Dams as a guide to formulating improvements in other areas.

2). Attaining a synergistic balance of centralized policy development and decentralized operations. The 1993 Reorganization substantially devolved decision making to the local level, while removing the line authority that then existed within some of the offices in Denver, including those of the Assistant Commissioners for Resource Management and Engineering and Research. This reorganization was intended to streamline decision making in the agency. It was assumed that the resultant local decision making would innately reflect Bureau-wide interests. Reclamation's experience since that time has indicated that this assumption is often unrealistic. Missing or ineffective policy-related documentation has often led to failure to address global perspectives and potential Bureau-wide impacts, which has left the organization vulnerable to criticism for both real and perceived inconsistencies. Also, because of the significant change in line authority, uncertainty developed regarding the precise role of the various offices remaining in Denver. Reclamation's experience with decentralization makes it clear that these offices can provide an invaluable service in maintaining consistency across the agency and safeguarding Bureau-wide interests.

While strategic & public policy direction is ultimately made at the Presidential appointee level, the Reclamation Manual includes implementation policy that direct the agency. Leadership in developing Reclamation Manual materials is carried out by the Office of Program and Policy Services. That Office serves as facilitator in utilizing established processes that allow for area and regional office participation. Reclamation's most recent organizational changes reinforce the policy leadership role that has been assigned to several of the offices located in Denver, such as the Office of Program and Policy Services and the Management Services Office.

This process allows for various perspectives to be considered as policy products are developed. However, inconsistencies exist in applying this policy at the area and regional office levels because of a perception that the guidance is not universally applicable. This illustrates the delicate balance that Reclamation must achieve between centralized policy development and decentralized operations if it is to manage future issues and challenges in a manner that provides both operational efficiency and Bureau-wide consistency. While Reclamation may have erred on the side of decentralized operations subsequent to the 1993 Reorganization, this *Managing for Excellence* Action Plan will help identify those areas where policy and oversight needs to be strengthened and where responsibilities and authorities need to be clarified. The actions outlined in the last section address those needs.

3). Application of the Secretary's 4 C's strategies to help multiple stakeholders combine perspectives in problem-solving efforts. Many of the issues and challenges facing Reclamation and its stakeholders arise not so much from technical uncertainty, but from the ambiguity that results from stakeholders having different objectives. Resolving these differences requires a collaborative and interest-based approach. The importance of this is recognized in the Secretary's 4C's: conservation through communication, consultation and cooperation. The 4C's are indispensable to Reclamation in its ever-increasing role as a facilitator of agreements between parties with multiple interests regarding the development and management of its water and power resource projects.

Reclamation currently develops policy in a collaborative effort among various levels of the agency, with staff from the Denver policy offices serving as facilitators. This process recognizes the issues and challenges unique to certain parts of the organization (including greater acknowledgement and incorporation of stakeholder concerns) which must be contemplated in developing policies which will be consistently and effectively applied. Reclamation believes that its existing Reclamation Manual development process will lend itself to inclusive management strategies in all of the subject disciplines for which policy is developed, and that this inclusive approach will reliably incorporate the 4C's.

A recent effort to transfer title of portions of the Provo River Project to the project beneficiaries is an example of how Reclamation policy is written to facilitate and encourage an inclusive management strategy. Reclamation's *Agreed Framework for the Transfer of Title* was developed in conjunction with a coalition of water user organizations. Based on the direction in this policy document, local management designed an inclusive data gathering and decision-making process involving not only the project beneficiaries, but a host of other stakeholders with varying interests in the outcomes. This effort required an extraordinary amount of cooperation from numerous individuals on issues ranging from economic and environmental impacts to recreation and operational concerns. In a relatively short timeframe, this inclusive process yielded a very successful outcome, including broadly supported legislation authorizing the transfer and a set of comprehensive agreements defining the implementation process. This and other successful examples will serve as guides to Reclamation during this evaluation process as the agency strives to incorporate inclusive management strategies into every aspect of its mission-related operations.

Reclamation has a long history of external stakeholder involvement, particularly with its water and power customers. This has been indispensable to developing water and power resource projects that serve the varying needs and interests of the diverse communities of the West. Despite occasional disagreements, Reclamation enjoys a positive relationship with most of its constituencies. However, increasing competition for the scarce water and power resources of the West requires that Reclamation work hard to sustain its successful relationships, improve others, and build up new ones. This will be accomplished by building collaborative competencies within Reclamation and engaging stakeholders in an inclusive process that applies shared interests and capabilities to the effective management of the issues and challenges faced.

Managing Existing Infrastructure

Reclamation's vast inventory of water and power infrastructure constitutes an enormous public investment of approximately \$250 billion in current dollars. With over 75 percent of the Department of the Interior's constructed assets, Reclamation has a major stewardship role in managing this infrastructure in the public interest. As noted in the NRC Report, the operational complexity and the age of much of this infrastructure will require focused management efforts to ensure that it continues to reliably deliver the

benefits for which it was constructed, particularly in light of significant budgetary constraints.

Complicating these management efforts is the fact that Reclamation is a unique agency largely governed by a set of diverse authorities ranging in applicability from Reclamation-wide to project-specific. These authorities often contain requirements specific to individual projects and particular functions. In developing this Action Plan, it is recognized that certain business practices are derived from these requirements. As society changes, new techniques are developed for effective management in the business world. As these management techniques are drawn upon and applied to government operations, the application is not a straightforward transfer of methods or theory, but an artful process of determining where they can provide meaningful improvements to the administration of public programs within the legal framework.

Functional Areas to be Evaluated

In order to ensure the effective management of its infrastructure in the public interest, Reclamation will thoroughly examine the following broad functional areas to identify and implement needed managerial and operational improvements:

- Engineering and Design Services
- Major Repair Challenges
- Asset Sustainment
- Lab Support
- Human Resources/Workforce

Principles and Benchmarks

The principles and benchmarks most applicable to the evaluation of needs in managing existing infrastructure are: (1) appropriate definition of Reclamation's stewardship responsibility as the owner of federal facilities; (2) determination of the appropriate level of core capability necessary for fulfillment of mission requirements, including the appropriate organizational location of that capability; and (3) transparency and value of construction and O&M costs.

1). Definition of Reclamation's stewardship responsibility as the owner of federal facilities. To address this stewardship responsibility, Reclamation must clearly understand the financial status of facilities it owns. Recent efforts have focused on identifying and reconciling the cost of lands acquired for each Reclamation project as identified in our land and financial records. In order to better manage existing infrastructure, it is critical that we add to that knowledge an understanding of the business case for those facilities: the construction investment in the facility, the cost allocation, the repayment status, the O&M allocation, the annual commitment of Reclamation funding to O&M, the design life, the facility condition, and any known or planned significant future investments for Safety of Dams work or major rehabilitation needs. This Bureau-wide, project-by-project information would be invaluable for future decision making regarding what actions relating to those facilities make sense, and who should do them.

Also essential to a discussion of stewardship responsibilities are two important concepts within Reclamation: transferred works and outsourcing.

Outsourcing is a term used universally to describe contracting for work outside of the agency or business. This has its roots in the basic economic concept of the division of labor. The philosophy is that companies can operate more efficiently and reduce costs by focusing on their core business activities while letting outside specialists focus on providing necessary but non-core services.

Within government agencies, outsourcing usually involves contracts with vendors developed through the acquisition process outlined in the Federal Acquisition Regulations. These types of contracts are for services or expertise furnished by consulting firms, educational institutions, or other service providers. These types of contracts can also be executed with water and power users when they compete through the acquisition process. In these acquisition contracts, the government retains direct responsibility and accountability for provision of the product and/or execution of the service. Under this type of contract, there is no transfer of stewardship responsibilities. Reclamation has taken advantage of these opportunities in areas ranging from information technology services to construction and rehabilitation of infrastructure.

However, Reclamation has additional requirements and binding relationships with water and power users that are not reflected in a typical outsourcing model. Reclamation law requires that a legal and binding relationship be established with beneficiaries (water and power user organizations) of Reclamation projects for the repayment of project construction costs. In many cases, relationships include the delegation, or *transfer*, of certain responsibility and accountability for operating and maintaining project facilities, and carrying out other functions of the project. The relationship is formalized in contracts written pursuant to authorities unique to Reclamation. The facilities for which O&M responsibility has been delegated in this manner to the beneficiaries are referred to as “Transferred Works.” Conversely, facilities for which Reclamation itself provides O&M are referred to as “Reserved Works.”

Further transfer of O&M responsibility to the project beneficiaries would reduce Reclamation’s workload. This may translate into greater efficiency. However, because of the special relationship with beneficiaries, this type of transfer is more than mere outsourcing.

Reclamation considers the transfer of project works as transferring a degree of stewardship responsibility through formation of a special relationship that can only be established pursuant to the statutory authorities in Reclamation law. Complete transfer of responsibility can occur only when actual title to the facilities is transferred to the beneficiaries. This requires Congressional authorization, but Reclamation has an established and successful framework for facilitating this process.

In light of the issues discussed above, some questions Reclamation must answer in this *Managing for Excellence* evaluation include: how do we ensure that we understand the

financial situation of each of our facilities (Existing Infrastructure); how can that knowledge assist us in making the right business decisions regarding that asset; how much of our stewardship responsibility should be delegated to the districts; how much O&M of our reserved works can be beneficially outsourced while maintaining the core capabilities necessary to ensure the agency remains a smart buyer of services and effectively fulfills its mission responsibilities; and how can we ensure that Federal responsibilities such as environmental, recreation and cultural resources are met?

2). Determination of the appropriate level and organizational location of core capability necessary for mission fulfillment. Given the extensiveness of Reclamation's infrastructure and the associated risk management responsibilities, it is crucial to maintain appropriate in-house technical expertise. Notwithstanding the opportunity for outsourcing and/or transferring O&M to customers, as stewards of these assets, Reclamation staff must be both experienced and contemporary in the technical fields required to maintain and oversee the maintenance of the infrastructure.

3). Transparency and value of construction and O&M costs. Transparency and value of construction and O&M costs is of critical importance for Reclamation and its customers. Efforts stemming from Reclamation's interaction with the Family Farm Alliance have yielded improved clarity and opportunity for customers to be active in development of the O&M programs for facilities in which they share the cost. Opportunities have been created for meetings, and input and information is being provided in a clearer and more understandable way. This improvement is a good start, but needs expanded and more personalized implementation. Efforts have been made to ensure that costs represent value, but re-visiting this issue with consideration toward transfer of O&M and its inherent responsibility, and a look at outsourcing will be helpful in making sure Reclamation and its customers can clearly see and evaluate the costs of construction and O&M.

Managing Future Construction

Construction Management capability within Reclamation has significantly contributed to fulfilling its mission. Although new project construction is a small part of the current workload, significant mission-critical construction activity continues to occur within Reclamation, including Safety of Dams modifications, major repairs of existing infrastructure, salinity control projects, and others. Other needs may also develop in the future which cannot be easily foreseen at this point. Construction management capability will continue to be essential to the fulfillment of Reclamation's mission. Determining and achieving the appropriate level and organizational location of that capability will be an important focus of this *Managing for Excellence* Action Plan.

Functional Areas to be Evaluated

Evaluation of a number of broad functional areas is critical to understanding how to achieve and maintain the appropriate level of construction management capability necessary for Reclamation to fulfill its mission in the 21st Century. These areas include:

- Engineering and Design Services
- Project Management
- Lab Support
- Human Resources

Principles and Benchmarks

The principles and benchmarks most applicable to the evaluation of needs in managing future construction are: (1) determination of the appropriate level and organizational location of core capability necessary for fulfillment of mission requirements; and (2) transparency and value of construction and O&M costs.

1). Determination of the appropriate level and organizational location of core capability necessary for fulfillment of mission requirements. As with the ability to maintain existing infrastructure, managing future construction requires the appropriate set of agency technical/engineering skills. It is prudent to ensure that construction oversight be staffed with first-hand experience, not just contract management skills. Core capability, once lost, is extremely difficult to recapture. Therefore, careful upfront examination and decision making are essential. Another concern raised in the NRC Report is whether the small numbers of engineering and design staff in some of the area offices can maintain core capability at a high enough level for future construction projects. This concern will also be addressed as Reclamation examines the appropriate organizational location of the core capabilities it must maintain.

2). Transparency and value of construction and O&M costs. Cost estimating and construction cost management have become significant issues for Reclamation in the last several years. Some suggest that this issue is long standing in the civil works arena and has just gained visibility recently. Whatever the case, the issue needs to be dealt with through effective management.

Competition in construction contracting is, by law, more complicated than price alone. It is Reclamation's challenge to ensure that the actual construction work is accomplished as competitively as is possible given the existing law which authorizes the construction so that customers and taxpayers derive optimum value for their investments. Effort must be expended up front to assure that the legal framework is understood and that Reclamation and its customers clearly understand its likely impact on construction costs.

Another factor in Reclamation's construction costs is the design standards the agency has established. In many cases, Reclamation's engineers have been the primary architects of design standards in the entire industry. These standards were developed to address not only physical engineering concerns, but also the significant federal risk management responsibility associated with Reclamation's large and complex facilities. These high

design standards have associated costs, which may or may not be appropriate in all of the construction and O&M activities performed by Reclamation or its customers. An analysis of this issue will be a part of this *Managing for Excellence* Action Plan.

Of equal importance are the construction management costs that are incurred by Reclamation staff in ensuring that the construction work is accomplished. Critical feedback from customers about the magnitude of this category of costs (sometimes referred to as overhead) must be addressed. Our customers need and deserve a transparent understanding of those costs and a discussion of what actions and processes generate those costs. This transparency will generate concerns about how Reclamation assesses its costs for those functions that are not visible on the ground during the construction of a facility. Those concerns are usually directed to the distributive costs of the regional offices, Reclamation staff in Denver and Washington, and Departmental initiatives. This issue requires scrutiny for Reclamation to be transparent and fair with its customers. This evaluation may draw into question whether the value of Reclamation's services is optimal, and the reality of that outcome will have to be considered. We believe that our recent work with project sponsors on the construction of the Animas-La Plata Project is a solid model that could be applied on other projects. An evaluation of this and alternative project management processes will be undertaken as part of this *Managing for Excellence* evaluation.

Description of Functional Areas and Action Items

As noted in each of the preceding sections, there are a number of major functional areas within which Reclamation's work can be categorized. These areas are:

- Relationships with Customers and Other Stakeholders
- Policies and Organization
- Engineering and Design Services
- Major Repair Challenges
- Project Management
- Asset Sustainment
- Research and Laboratory Services
- Human Resources/Workforce

Following is a more detailed discussion of each of these functional areas, and the action items corresponding to them which Reclamation must address in order to meet the challenges described in the preceding sections.

Reclamation will follow a similar course for accomplishing each of these action items which will include:

- assigning the task to the appropriate person/entity;
- defining the task;

- analysis of the issues/problems;
- development of alternatives and recommendations; and
- decision making.

Reclamation's senior management will begin implementation of this action plan by assigning each of the action items to an appropriate organization or informal team within the agency which will perform the task definition, analysis, and alternative development portions of the action.

Upon appointment by senior management, each entity will organize their efforts to address the action item assigned them. This will include a budget estimate, framing of the issue, milestones and deadlines, and an outreach plan.

It is expected that budget for this effort will come almost exclusively from previously appropriated dollars. While the total effort is expected to require staff time, travel costs, and contracted work totaling approximately \$10 million, this will primarily be accomplished by reprioritizing the use of these existing resources.

As part of defining the task for its action item and organizing efforts to accomplish it, one of the initial products of the assigned entity will be a detailed outreach plan. This plan will include a discussion of the appropriate level and scope of communication, consultation and collaboration with customers and other stakeholders throughout the entire process. That process will consist of defining the task, analyzing the issues, developing alternatives, and making decisions, with detailed steps regarding how this will be accomplished.

Relationships with Customers and Other Stakeholders

An important part of Reclamation's mission is to ensure that the service it provides its customers represents significant economic value for them. However, achieving that goal unilaterally is difficult. Our customers know and understand the needs and financial constraints of the individual users they represent. Similarly, Reclamation knows the requirements it must meet as a steward of federal assets. Some of Reclamation's customers possess the technical capability to evaluate, and in many cases devise, the construction, operation, and maintenance solutions their project works need. Others rely fully on Reclamation for this capability. Effective, forthright communication between Reclamation and its customers is therefore essential if the agency is to deliver optimum value. Another important consideration is that these are public projects. As discussed in the NRC Report and other sources, Reclamation increasingly operates in an environment influenced by a broad array of other stakeholders who, although they may not have the same contractual and statutory relationships to Reclamation as the water and power customers, nonetheless have important contributions and perspectives which Reclamation must consider as it manages issues and challenges, existing infrastructure, and future construction.

Action Items:

- Strengthen interaction with customers and other stakeholders at national, regional, and project levels to address Bureau-wide issues. (Ongoing)
- Ensure that the Reclamation Manual policies and directives and standards are readily available on the internet. (Mar – May 2006)
- Revise Reclamation’s centralized policy development process to require appropriate incorporation of the Secretary’s 4C’s, transparency and value into Reclamation Manual policies, directives, and standards. (Mar – May 2006)

Policies and Organization

Reclamation has accomplished a great deal in the past few years in improving its organizational structure and supporting policies in order to meet future challenges. Taking these accomplishments into account, the following action items are intended to further refine the balance between centralized policy and oversight on the one hand and an effective, decentralized operational organization. This will necessarily include an analysis of alternative organizational configurations.

Action Items:

- Identify structured decision-making process gaps and potential remedies, with particular attention to the recommendations from “Review of Decision Making in Reclamation.” (Mar – Dec 2006)
- Refine and clarify delegations of authority within the agency to ensure that they are commensurate with assigned responsibility, including appropriate training of line management with regard to authorities. This will allow Reclamation to respond effectively to the needs of its customers and other stakeholders in a manner that is consistent throughout the agency and which enhances the agency’s credibility at all levels. (Mar – Aug 2006)
- Identify ‘policy gaps’ created by sunseting of the Reclamation Instructions (i.e., missing or inadequate Reclamation Manual Policy, Directives & Standards, technical guidance) that are critical to addressing current and near-term issues and challenges. (Aug - Oct 2006)
- Expedite the development of policy, directives and standards, and technical guidance determined necessary in the preceding step to assure that local decision-making is consistent with Reclamation’s philosophy and stewardship responsibilities. (Oct 2006 – Dec 2007)
- Consider the scenarios discussed in Chapter Five of the NRC Report and what refinements, if any, to Reclamation’s organizational structure may be useful in meeting future challenges under each of these scenarios. (Mar – Dec 2006)

Engineering and Design Services

Reclamation has significant technical capability in Engineering and Design services throughout the agency from the Technical Service Center to the regional, area, and project offices. As discussed in the sections above on “Managing Existing Infrastructure” and “Managing Future Construction,” Reclamation must determine and achieve the appropriate level of core capability it needs in these areas to fulfill its mission

responsibilities and provide optimum value to its customers. This will involve decisions about the volume, type, and organizational location of core engineering and design capabilities. The action items below will ensure that Reclamation makes and implements those important decisions.

Action Items:

- Conduct a comprehensive evaluation of historical and near-term workload in this area, including all design, estimating, and construction management work from the TSC, regions, and area offices. (Mar – July 2006)
- Evaluate the identified workload in terms of its commercial, commercial core, and/or inherently governmental nature, in accordance with the definitions in OMB Circular A-76. This will include the critical determination of the sustainable core capability needed to achieve Reclamation’s mission-critical work. (Aug - Nov 2006)
- Analyze the unit to unit costs of in-house performance of the commercial workload vs. outsourcing. (Aug - Nov 2007)
- Based on the results of the foregoing, complete a right-sizing process with regard to design, estimating, and construction management staff within the agency, including determination of the appropriate location and distribution of technical capability. A transition plan will then be developed and implemented to achieve the determined size, type, and location of staff resources. (Nov 2006 - April 2007)
- Analyze the potential benefits and requirements/tradeoffs associated with alternative funding of the engineering and design staff. This would include an analysis of whether the costs of maintaining core capabilities within the TSC should appropriately be funded by direct appropriations, by water and power customers, or by some combination of the two. (Jun – Aug 2007)
- Implement design engineering estimate oversight functions associated with the Design Estimate Construction/Dam Safety Office (DEC/DSO) position; identify and conduct pilot reviews of key project feature construction estimates during FY 2006. (Mar – June 2006)
- Establish agency policies and procedures for the oversight of design and construction estimates. (June - Oct 2006)
- Analyze Reclamation’s engineering standards; both the appropriateness of them and how they are applied internally and externally. (July - Dec 2006)

The foregoing actions will be followed by a blue ribbon panel review of the process and results to verify the effectiveness and efficiency of the resultant organization, and particularly to assess whether the appropriate mix of in-house capability vs. outsourcing has been achieved.

Major Repair Challenges

Customers, Reclamation management, and other Administration policy makers are concerned about challenges presented by an aging infrastructure that extend beyond those already detailed in the section “Managing Existing Infrastructure.”

Of course, significant improvements in the engineering and design services, research, asset management, and human resources areas will directly benefit projects facing major repair challenges. However, these major repair challenges present three additional questions not raised or answered previously: what new mechanisms can Reclamation devise to help customers finance their allocated share of major repair projects; what processes or measuring tools can be developed to determine whether a major repair project is warranted; and, working with stakeholders, what innovations can be developed to add value to major repair projects?

That a major repair project is well justified economically does not automatically confer on project users the financial ability to meet their share of costs in the same years for which those costs are allocated. Even districts that maintain set-aside funds for just such exigencies sometimes find that those funds are insufficient for major repair projects. Legislation is pending in the Congress to authorize a loan guarantee program within Reclamation for just this purpose. This Action Plan will explore what is needed to secure enactment of that legislation or some alternative that meets the needs of both project sponsors and taxpayers.

Meanwhile, some repair projects appear so costly that they raise the question of whether they are economically justified at all, with or without new financing mechanisms. Developing the tools to produce analyses of repair project value that all stakeholders find useful will be the second action item responding to major repair challenges.

The third and related action is creation of processes to bring together the ingenuity of a project's community to add value to major repair projects. This element must employ the Secretary's 4C's and the processes developed concurrently by the action items for *Relationships with Customers and Other Stakeholders*.

Action Items:

- Seek/Obtain legislative authority for loan guarantees to facilitate private financing for water users' share of major repair/extraordinary O&M costs, prepare for subsequent program implementation. (Mar – Aug 2006)
- Develop processes or measuring tools to determine whether a major repair project is warranted. (May – Dec 2006)
- Working with stakeholders, develop innovative processes that can add value to major repair projects. (May – Sep 2006)

Project Management

The concept of 'Project Management' has had a varied past in Reclamation. Before the establishment of regional offices in the 1940s, the basic focus of Reclamation authority and effort was 'the Project.' Project Development offices and Project Construction offices planned and constructed project facilities. Since those early years, Reclamation's business has become less project-centric, and with our reorganization efforts in the early 1990s, most of the guidance on project development has disappeared.

Without appropriate guidance and follow through, the project planning and construction process is a case-by-case effort with the inevitable outcome being lack of consistency. There is strong agreement across the agency that improvement is needed. The most significant challenge will be providing some degree of continuity from project inception through the planning process to construction and into operation.

Action Items:

- Identify and implement a project management process for all construction projects. (Mar – July 2006)
- Study the merits of developing a comprehensive and structured project management process for managing projects from inception through the planning and construction stages and into operation, and make a determination of whether such a process should be developed. (Mar – July 2006)
- If the results of the action item above so direct, develop this comprehensive, structured project management process and develop policies, directives and standards, and other guidance documents to assure effective implementation. (July-Dec 2006)
- Develop a training program for all personnel with project management responsibilities. This training program will incorporate existing project management tools as well as any processes developed as a result of the two action items above. It will also address decision-making, stakeholder relations, the differences between project and program management, and other topics relevant to successful project management. (July-Dec 2006)
- Establish and maintain a central repository for examples and appropriate guidance regarding procurement contracting. (Jun – Dec 2006)

Asset Sustainment

As discussed in the NRC Report and other sources, the most substantial part of Reclamation's workload involves the effective management of its vast infrastructure inventory. As a result, the greatest efficiencies to be gained within the agency, and the most important leadership decisions to be made, will be based on a thorough analysis of how this infrastructure is to be managed. This analysis will be conducted from a physical and engineering standpoint as well as a financial and economic one.

Action Items:

- Establish and implement a standard, agency-wide process for evaluating and communicating the current financial circumstances of all Reclamation infrastructure, including cost invested, repayment status, O&M cost allocation, design life, facility condition, etc. (Mar – Sep 2006)
- Determine where opportunities exist for beneficial transfer of O&M responsibility to water users and implement them. (Mar – Jun 2007)
- Determine where opportunities exist for beneficial outsourcing of O&M for reserved works and implement them. (Mar – Sep 2007)
- Determine where opportunities exist for mutually beneficial transfer of title to project sponsors in order to eliminate Reclamation's responsibility and costs for those facilities, and encourage any that are appropriate. (Mar – Jun 2007)

- Analyze effectiveness of current O&M planning (does it square with the Reclamation's Asset Management Plan and is it being done agency-wide). (Mar – Sep 2006)
- Integrate O&M planning with the budgeting process (analyze the extent to which the current Budget Review Committee process accomplishes this). (May 2006 – Feb 2007)
- Benchmark O&M of water storage and distribution facilities in a manner modeled after current practices with power facilities, starting with pilot program. (Oct 2006 – Jun 2007)

Research and Laboratory Services

In the early 2000s, 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 (regional, Bureau-wide, interagency, academic, and water/power user perspectives) provides advice on priority areas. The Director serves on DOI interagency R&D committees, as well as on appropriate White House Office of Science and Technology Office working groups, and serves as the major point of contact/coordination with the National Academies. The R&D Office also manages the external Water Desalination R&D Act of 1996, as amended.

The R&D Office does not manage the laboratory services. Historically, the labs have been managed within the engineering/technical divisions of the Technical Service Center and its predecessor organizations. There also are a few labs located within regional and area offices. Although R&D and Laboratory Services are managed in separate organizations, the action items below will examine further improvements to the R&D funding process, as well as TSC and regional laboratories.

Action Items:

- Determine where opportunities exist for use of federal and non-federal lab services. (Mar – Oct 2006)
- Determine where opportunities exist for retaining, consolidating and/or eliminating lab services within the TSC and regions. (Jun – Dec 2006)
- 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. (Mar 2006 – Dec 2007)
- Re-evaluate the (S&T) Program Steering Committee's charge to increase opportunities to meet mission-core R&D needs in the future. (Mar – July 2006)
- Assess the National Academy of Sciences' review of the role of federal desalination R&D and consider recommendations. (Oct - Dec 2007)

Human Resources/Workforce

Reclamation is actively conducting human capital planning efforts to ensure it can fulfill its mission requirements in managing issues and challenges, existing infrastructure, and future construction. The action items below address the issues highlighted in the NRC Report and other sources cited above, including: succession planning; recruitment and retention of employees with the proper skill sets, including collaborative competencies; training of existing employees to develop and maintain these skill sets; strategies for dealing with the effects of outsourcing of various agency functions; and innovative use of partnerships.

Action Items:

- Identify critical positions where collaborative competencies are needed and refine position descriptions to include these competencies. (Mar – July 2006)
- Create collaborative competency curriculum. (July – Dec 2006)
- Utilize the Department's Learning Management System to ensure that collaborative competencies are a part of each employee and manager's skill set. (Sep 2006 – Mar 2007)
- Evaluate the effectiveness of Reclamation's training and development programs in successfully planning for succession, including leadership development and technical training. (May – Nov 2007)
- Ensure that the conclusions reached and the decisions made as a result of all of the preceding action items are incorporated into Reclamation's current workforce and succession planning processes. (July-Dec 2006)