United States Department of the Interior

BUREAU OF RECLAMATION
Washington, DC 20240

NOV 16 2007

IN REPLY REFER TO:
PXAO-1100
ADM-1.10

MEMORANDUM

To: Acting Deputy Commissioner - Operations

From: Robert W. Johnson
Commissioner

Subject: Decision Related to Managing For Excellence Teams 26-27 Final Recommendations

You are hereby directed to take the appropriate actions necessary to implement the recommendations contained in the attached decision document, *Managing for Excellence Team 26-27 Final Recommendations*.

Specifically, work directly with your appropriate Regional Directors and Area Managers to secure formal O&M transfer agreements for the 16 facilities or projects listed by the Team, subject to mutual agreement with project beneficiaries. In addition, look for other opportunities to contract for O&M where deemed appropriate.

Regarding facilities or projects where Reclamation performs the O&M that were not specifically identified by the Team as candidate projects, but where Reclamation is budgeting for O&M and getting reimbursed by the project beneficiaries, look for additional opportunities that could lead to an eventual transfer.

Lastly, encourage your Regional Directors and Area Managers to continue to evaluate and share O&M practices to improve efficiency and look for additional opportunities to contract for O&M on facilities where day-to-day O&M is being performed by Reclamation staff.

Attachment

cc: 91-00000 (Collier), 91-10000, 92-00000 (Serote, Brown), 94-00000 (Todd), 94-30000 (Wolf, Smith), 96-00000 (Quint), 96-40000
84-20000 (Beckmann, Moon), 84-21000 (Feuerstein, Wendling), 84-27000 (Harrison, Mattingly), 84-40000 (Achterberg, Rudd), 84-57000 (Krause, Maxey), 86-60000 (Gabaldon, Medina), 86-68000 (Pimley, Weitkamp)

PN-1000 (McDonald, Kaley), EPH-2000 (Gray), MP-100 (Davis, Schlueter), TO-431 (Partridge), LC-1000 (Gray, Ruiz), PXAO-1100 (Chandler), UC-100 (Walkoviak, Daly), PRO-100 (Barrett), GP-1000 (Ryan, Blankenship), MT-400 (Long)
Area Managers (see attached list)
(w/att to each)

AREA MANAGERS LIST

Manager, Boise ID, Attention: SRA-1000
Manager, Grand Coulee WA, Attention: GCP-1000
Manager, Yakima WA, Attention: UCA-1000
Manager, Portland, OR, Attention: LCA-1000
Manager, Klamath Falls OR, Attention: KO-100
Manager, Carson City NV, Attention: LO-100
Manager, Shasta Lake CA, Attention: NC-100
Manager, Folsom, CA, Attention: CC-100
Manager, Fresno CA, Attention: SCC-100
Manager, Sacramento CA, Attention: CVO-100
Manager, Phoenix AZ, Attention: PXAO-1000
Manager, Boulder City NV, Attention: LCD-1000
Manager, Temecula CA, Attention: SCAO-1000
Manager, Boulder City NV, Attention: BCOO-1000
Manager, Yuma AZ, Attention: YAO-1000
Manager, Albuquerque NM, Attention: ALB-100
Manager, Durango, CO, Attention: FCCD-100
Manager, Salt Lake City, UT, Attention: UC-600
Manager, Provo UT, Attention: PRO-100
Manager, Grand Junction CO, Attention: WCG-CDeAngelis
Manager, Bismarck ND, Attention: DK-100
Manager, Loveland CO, Attention: EC-1000
Manager, Billings MT, Attention: MT-100
Manager, Grand Island NE, Attention: NK-100
Manager, Austin TX, Attention: TX-Trevino
Manager, Mills WY, Attention: WY-1000

Opportunities for Beneficial Transfer and/or Outsourcing of O&M Responsibilities

Executive Sponsor: Bob Quint

Team Members:

Randy Chandler, Team Lead, Phoenix Area Office, Lower Colorado Region
Bruce Barrett, Provo Area Office, Upper Colorado Region
William Gray, Upper Columbia Area Office, Pacific Northwest Region
Elizabeth Partridge, South-Central California Area Office, Mid Pacific Region
Darrel Krause, Office of Program and Policy Services, Denver
Richard Long, Montana Area Office, Great Plains Region

Action Item Statements From the Managing for Excellence Action Plan:

- Determine where opportunities exist for beneficial transfer of O&M responsibility to water users and implement them (Action Item 26).
- Determine where opportunities exist for beneficial outsourcing of O&M for reserved works and implement them (Action Item 27).

Scope Statement from Managing for Excellence Project Management Plan:
Reclamation prefers that project beneficiaries perform the day-to-day O&M where appropriate, through a formal transfer agreement, with Reclamation in the oversight role. Typically, the terms of the repayment contract require the repayment entity to assume responsibility for O&M upon project completion. If, for whatever reason, such a transfer agreement cannot be achieved, consideration is given to contract with a project beneficiary to perform the day-to-day O&M functions, with Reclamation in the contract administration role. This option may require Reclamation to retain more of a stewardship role, beyond the usual oversight, than it would under a formal transfer agreement. If the O&M cannot be transferred through an agreement or contracting with a project beneficiary is not advantageous, Reclamation retains the responsibility and uses its own forces to conduct the O&M of project facilities.

The Team, in an effort to be consistent with Team 8, adopted the definition the term "outsourcing" to encompass both the transfer of O&M responsibility and the contracting of O&M services. Therefore, the scope of action items 26 and 27 focused, respectively, on opportunities for O&M transfers and opportunities for contracting of O&M services.

Approach and Methodology: To accomplish the objectives, the Team developed a questionnaire for Reclamation Area Managers and used the results to compile the following list of 16 facilities or projects where interest already exists or the facility was determined to be a good candidate for pursuing an O&M transfer agreement with a project beneficiary.

Upper Colorado
- Animas La-Plata Project (when completed)
- Deer Creek Powerplant

Great Plains
- Pactola Dam
- Deerfield Dam
- Nelson Dikes
- Fresno Dam

Mid Pacific
- Link River Dam
- Straits Drain
- Gerber Dam
- Clear Lake Dam
- Ady Headworks to Klamath Drainage District
- Red Bluff Diversion Dam
- Shasta Pumping Plant

Pacific Northwest
- North and Southside Canal Headworks at Minidoka Dam

Lower Colorado
- Drop 2 Reservoir (when completed)
- Central Arizona Project Indian distribution facilities (as completed)

Deliverables: The Team developed a report that summarizes general Reclamation O&M practices, documents pertinent laws and policies related to O&M, documents the current status of all Reclamation facilities and projects, addresses the benefits of such transfers to beneficiaries, and identifies transfer candidate facilities or projects

Recommendations: The Team recommendations are as follows:

1. Regional Directors and Area Managers should make an attempt to secure formal O&M transfer agreements for the 16 facilities or projects listed above subject to mutual agreement with project beneficiaries.

2. Regional Directors and Area Managers should look for opportunities to contract for O&M where deemed appropriate.

Submitted by:

Randy N. Chandler 10/3/07
Randy N. Chandler, Team Leader Date

11/6/07
Bob Quint, Executive Sponsor Date

11/13/07
Larry Todd, Deputy Commissioner, PAB Date

Managing for Excellence – Action Items 26 & 27

Opportunities for Beneficial Transfer and/or Outsourcing of O&M Responsibilities

Final Report

10-01-07

Managing for Excellence – Action Items 26 & 27

Opportunities for Beneficial Transfer and/or Outsourcing of O&M Responsibilities

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Managing for Excellence – Action Items 26 & 27

Opportunities for Beneficial Transfer and/or Outsourcing of O&M Responsibilities

EXECUTIVE SUMMARY

The Bureau of Reclamation, in response to the National Research Council (NRC) study report entitled *Managing Construction and Infrastructure in the 21st Century,* developed the Managing for Excellence (M4E) Action Plan that addressed many functional areas within the organization. This report addresses two of the M4E action items (26 and 27) within the asset sustainment functional area as follows:

- Determine where opportunities exist for beneficial transfer of operation and maintenance (O&M) responsibility to water users and implement them (Action Item 26).
- Determine where opportunities exist for beneficial outsourcing of O&M for reserved works and implement them (Action Item 27).

It should be noted that action item 8, included within the M4E Action Plan, focused on the need to consider alternative scenarios for future infrastructure management. One of the scenarios was related to outsourcing of O&M. Team 8 separated this scenario further into two distinct sub-scenarios, (1) transfer of O&M and (2) contracting out of O&M. As documented within their report, Team 8 explored both of these scenarios in considerable detail, including implementation considerations, advantages, disadvantages, and obstacles related to each.

Team 26/27 (Team) and Team 8 recognized that coordination of efforts would be critical to ensure the work of both teams would not conflict with each other but would, in fact, complement each other. One primary area of focus for Team 8 was on the "outsourcing" scenario. The Team ultimately determined that the term "outsourcing" would include both the transfer of O&M responsibility and the contracting of O&M services. Therefore, the scope of this Team focused on opportunities for O&M transfers and opportunities for contracting of O&M services.

Reclamation prefers that project beneficiaries perform the day-to-day O&M where appropriate and in the best interest of the public, through a formal transfer agreement, with Reclamation in the oversight role. Typically, the terms of the repayment contract may require the repayment entity to assume responsibility for O&M upon project completion. If, for whatever reason, such a transfer agreement cannot be achieved, an option would be to consider direct contracting with a project beneficiary to perform the day-to-day O&M functions, with Reclamation in the contract administration role. This option may require Reclamation to retain more of a stewardship role, beyond the usual oversight, than it would under a formal transfer agreement. If the O&M cannot be either

transferred through a formal agreement or direct contracted with a project beneficiary, Reclamation retains the responsibility and uses its own forces to conduct the O&M.

Currently, the O&M responsibility of approximately 66% of project facilities Reclamation-wide, totaling nearly 500 facilities, has been transferred to project partners and beneficiaries. In most cases, the remaining reserved works are maintained by Reclamation forces, with Reclamation contracting the entire O&M activities at approximately 7% of the reserved works facilities.

Transferring O&M is the most common method of accomplishing operation and maintenance, and there are still opportunities for transfer of O&M throughout Reclamation. Implementing the O&M transfer of some additional facilities can reduce the need for Reclamation appropriations for these transferred facilities and may allow the savings to be applied to other important O&M activities. Reclamation and the project beneficiary should continue to discuss and explore how each could benefit by transferring the O&M of appropriate project facilities.

The Team developed a questionnaire for Reclamation Area Managers and used the results to compile a list of 16 facilities or projects where interest already exists or the facility was determined to be a good candidate for pursuing an O&M transfer agreement with a project beneficiary. The following facilities were identified by each region:

Upper Colorado

Animas La-Plata Project (when completed)
Deer Creek Powerplant

Great Plains

Pactola Dam
Deerfield Dam
Nelson Dikes
Fresno Dam

Mid Pacific

Link River Dam
Straits Drain
Gerber Dam
Clear Lake Dam
Ady Headworks to Klamath Drainage District
Red Bluff Diversion Dam
Shasta Pumping Plant

Pacific Northwest

North and.Southside Canal Headworks at Minidoka Dam

Lower Colorado

Drop 2 Reservoir (when completed)
Central Arizona Project Indian distribution facilities (as completed)

Through the same questionnaire process, the Team also looked for opportunities to pursue the contracting of O&M services (for all O&M activities at a facility), but no specific facilities were identified by the regions at this time. However, as discussions are held to try to achieve O&M transfers for the facilities listed above, contracting for O&M may be considered as a viable alternative if O&M transfer is not possible. Contracting for O&M (generally for the entire facility) is currently being used successfully by Reclamation on 18 project facilities.

Furthermore, each Reclamation office currently performing O&M is unique in its internal capabilities and must determine when it is appropriate to contract specific O&M work activities versus doing the work with Reclamation personnel. These decisions are real time and consider such things as resource availability, the recurring nature of the task, capability of staff skill set, cost comparisons, and priorities. No attempt has been made to determine the percentage of work that is being contracted at facilities where Reclamation provides the day-to-day O&M activities. Further, the practice of contracting for certain tasks related to O&M of facilities is a common practice by Reclamation. This practice should continue, and O&M offices are encouraged to periodically evaluate if work can be contracted out in order to achieve maximum efficiency and cost-effectiveness of project O&M.

The Team recommendations are as follows:

1. Regional Directors and Area Managers should make an attempt to secure formal O&M transfer agreements for the 16 facilities or projects listed above subject to mutual agreement with project beneficiaries.

2. Regional Directors and Area Managers should look for opportunities to contract for O&M where deemed appropriate.

Opportunities for Beneficial Transfer and/or Outsourcing of O&M Responsibilities

INTRODUCTION

Managing for Excellence Action Plan

In response to the National Research Council (NRC) study report entitled, *Managing Construction and Infrastructure in the 21st Century,* Reclamation developed the following two action items in its Managing for Excellence (M4E) Action Plan:

- Determine where opportunities exist for beneficial transfer of O&M responsibility to water users and implement them (Action Item 26).
- Determine where opportunities exist for beneficial outsourcing of O&M for reserved works and implement them (Action Item 27).

It should be noted that action item 8, included within the M4E Action Plan, focused on the need to consider alternative scenarios for future infrastructure management. One of the scenarios was related to outsourcing of O&M. Team 8 separated this scenario further into two distinct sub-scenarios, (1) transfer of O&M and (2) contracting out of O&M. As documented within their report, Team 8 explored both of these scenarios in considerable detail, including implementation considerations, advantages, disadvantages, and obstacles related to each. Team 8's report also outlined several case studies and examples in its Appendix to further illustrate the issues and lessons learned regarding these two options.

Team Formation

In development of the two above-described action items, Reclamation acknowledged in the M4E Action Plan that the concepts of "transfer of O&M responsibility" and "outsourcing of O&M" are closely related when discussing stewardship responsibilities. As such, for efficiency and effectiveness in the evaluation of potential opportunities under these two scenarios, it was decided to combine the related action items under one Team (Team 26/27).

The Team created to address these two action items included a representative from each of the five regions and the Office of Program and Policy Services. This representation was intended to ensure that all of Reclamation was comprehensively represented to address O&M transfer and outsourcing (contracting) opportunities.

Action Item Scope

The Team recognized early on that coordination with Team 8 would be important to complement work efforts and avoid duplication. Team 26/27, through coordination with Team 8, continuously evaluated the scope of these actions items and made an effort to use similar definitions and terminologies. In particular, one of the focus areas for Team 8 was on the "Outsourcing" scenario relative to meeting future challenges in infrastructure management. Team 8 applied the term "outsourcing" more broadly to encompass both the transfer of O&M responsibility and the contracting of O&M services. Therefore, the scope of action items 26 and 27 focused, respectively, on opportunities for O&M Transfers and opportunities for Contracting of O&M services.

The scope of transferring O&M is further defined by those situations where the O&M is performed by a non-Federal entity (i.e., project beneficiary) on a daily basis under a formal O&M transfer agreement and providing direct funding of the reimbursable costs. The scope of contracting for O&M services, as it relates to outsourcing, requires further explanation as described below.

Reclamation's *Managing for Excellence* report states, "Outsourcing is a term used universally to describe contracting of work outside of the agency or business. Within government agencies, outsourcing usually involves contracts with vendors developed through the acquisition process outlined in the Federal Acquisition Regulations." This generally involves specific services or products to be provided, whereby the government retains direct responsibility and accountability for their receipt, and no transfer of stewardship responsibilities occurs as a result of such contracting. This type of vendor contracting is used routinely throughout Reclamation for selected O&M services and products where specialized competencies are needed. Reclamation has not subjected the O&M of its facilities to competition under the acquisition process of the Federal Acquisitions Regulations and Circular A-76. (See Team 8's report for more information related to this "competitive" outsourcing issue.)

A comprehensive determination of additional opportunities for such vendor contracting would be extremely difficult due to the wide range of Reclamation facilities and related services/products that could be provided. Therefore, this type of vendor contracting was not included in the scope of action item 27 by this Team.

However, within Reclamation, direct contracting or "sole sourcing" the O&M of water and power facilities with project beneficiaries/users is occurring today. Typically, the contract between Reclamation and the project beneficiary is for the O&M of entire facilities or project. The project beneficiary enters into a contract with Reclamation to perform the day to day O&M of the Federal facilities for Reclamation, which retains the direct stewardship responsibility and accountability. Reclamation considers the transfer of O&M as transferring a degree of the stewardship responsibility through formation of a special relationship that can only be established pursuant to the statutory authorities in Reclamation law. Opportunities for this means of outsourcing, e.g., direct contracting of O&M with project beneficiaries, were the focus of the scope for action item 27.

BACKGROUND

Reclamation, upon project completion, must ensure that O&M is carried out in such a manner that the project benefits will be realized by the beneficiaries and the federal investment is protected. Although project authorization, repayment contracts, and other factors may have a bearing on how project O&M is accomplished, Reclamation typically utilizes the following mechanisms in order to achieve O&M:

1- Reclamation enters into a formal transfer agreement with the project beneficiary to perform O&M.
2- Reclamation contracts O&M services with the project beneficiary.
3- Reclamation retains O&M responsibility with Federal workforce.

O&M costs associated with Reclamation projects are typically allocated based on authorized project purposes and benefits. Where irrigation is the only authorized purpose, 100 percent of the project O&M costs are generally paid by the irrigators. Multipurpose projects may have benefits that include hydropower, irrigation, municipal & industrial water, flood control, recreation, and fish & wildlife, and portions of the O&M costs may be allocated to these different purposes. O&M costs allocated to reimbursable purposes are the responsibility of the water users and has no relationship to who is operating the facilities. For example, if Reclamation performs the O&M, the irrigation beneficiary advances funds to Reclamation for the irrigation component of the facility O&M costs. When Reclamation enters an O&M transfer agreement with a non-Federal entity, the O&M cost allocation remains intact and monies are exchanged as appropriate dependent on whether project benefits are "reimbursable" (irrigation, hydropower, municipal & industrial), or "non-reimbursable" (flood control, multi-purpose recreation and fish & wildlife).

Transferred Works

"Transferred Works" are defined as facilities that are Reclamation-owned or are part of an authorized Reclamation project, for which the O&M is performed by a non-Federal entity (i.e., project beneficiary) on a daily basis under a formal O&M transfer agreement. This relationship includes the delegation or transfer of day-to-day responsibility for O&M of the project facilities. However, under the terms of the formal O&M transfer agreement, the project beneficiary performing the day-to-day O&M is accountable to Reclamation for proper performance of the O&M. The long-term oversight of the Federal projects still resides with Reclamation.

The Reclamation Extension Act of August 13, 1914, Section 5, states:
"Provided, That, whenever any legally organized water users' association or irrigation district shall so request, the Secretary of the Interior is hereby authorized, in his discretion, to transfer to such water users' association or irrigation district the care, operation, and maintenance of all or part of the project works, subject to such rules and regulations he may prescribe."

Reclamation has utilized this authority over the years to transfer the O&M of many projects through repayment and O&M transfer contracts. In fact, to-date, the O&M of almost 90 percent of Reclamation's water conveyance and distribution facilities (mostly single-purpose irrigation facilities) has been transferred to water user entities. O&M has also been transferred for a number of multipurpose project features, including the complete project in some cases.

Many of these "traditional" transfers have been (and are) planned and implemented as soon as practical following completion of project facility construction. This allows for a competent organization to be available and an orderly transition to take place from construction to O&M status. When facilities are not "transferred" to project beneficiaries immediately upon project completion, it can be more difficult to achieve a transfer. This is because it is generally more difficult to develop a qualified organization that is fully capable to perform O&M and make the necessary transition of responsibility from Reclamation to the organization.

Reserved Works

"Reserved Works" are defined as facilities that are Reclamation-owned or are part of an authorized Reclamation project, for which the O&M is performed by Reclamation personnel on a daily basis, or under any other arrangement that does not meet the definition of "Transferred Works". This could include contracts or agreements with non-Federal entities to perform entire project facility O&M or specific O&M activities or tasks in exchange for payment for services rendered.

For some Reclamation projects or portions of projects, a readily identifiable water user group or non-Federal entity with an interest and capability to perform day-to-day O&M under an O&M transfer agreement does not exist. Other issues that reduce the potential to effectively accomplish an O&M transfer include:

- The multipurpose nature of the project,
- Complexities associated with operations,
- Allocation of the water supply,
- International treaties and interstate compacts,
- Unadjudicated water rights,
- Endangered species,
- Tribal government involvement in the project, and
- National Critical Infrastructure

Contracting for O&M Services

The Team's effort to evaluate "contracting for services" as a method to accomplish O&M of Reclamation facilities was limited to the option of direct contracting or "sole sourcing" with project beneficiaries. As mentioned previously, a comprehensive determination of additional opportunities for competitive vendor contracting would be extremely difficult

due to the wide range of Reclamation facilities and related services/products that could be provided. As a result, the Team did not explore the option of competitive contracting with commercial vendors.

Reclamation currently utilizes direct contracts and cooperative agreements with irrigation districts and other non-federal project beneficiaries for O&M services at 18 facilities. These facilities are identified in the footnotes of the summary listing of Reserved Works Facilities. Decisions on what work is appropriate to accomplish under service contracts or agreements is made on a case-by-case basis dependent on many considerations, including staffing levels and workload, skill sets within Reclamation's workforce, technical expertise available from project beneficiaries, cost effectiveness, and timeframe to complete the work. It should be noted that direct contracting out to a project beneficiary of all or portions of the O&M of reserved works facilities could be a first step toward a "traditional" O&M transfer.

Figure 1 provides as an illustration of the types and numbers of water and power facilities that are currently categorized as either transferred or reserved (O&M by Reclamation or contracted O&M.) This gives an indication of the extent to which Reclamation has transferred O&M or contracted O&M responsibility for project facilities.

Tables 1 – 3 are provided as a further breakdown by Region of the status of all Reclamation facilities, both Transferred and Reserved. It should be noted that individual buildings, recreation sites, and wildlife areas are not included in the numbers shown on the figure or the tables.

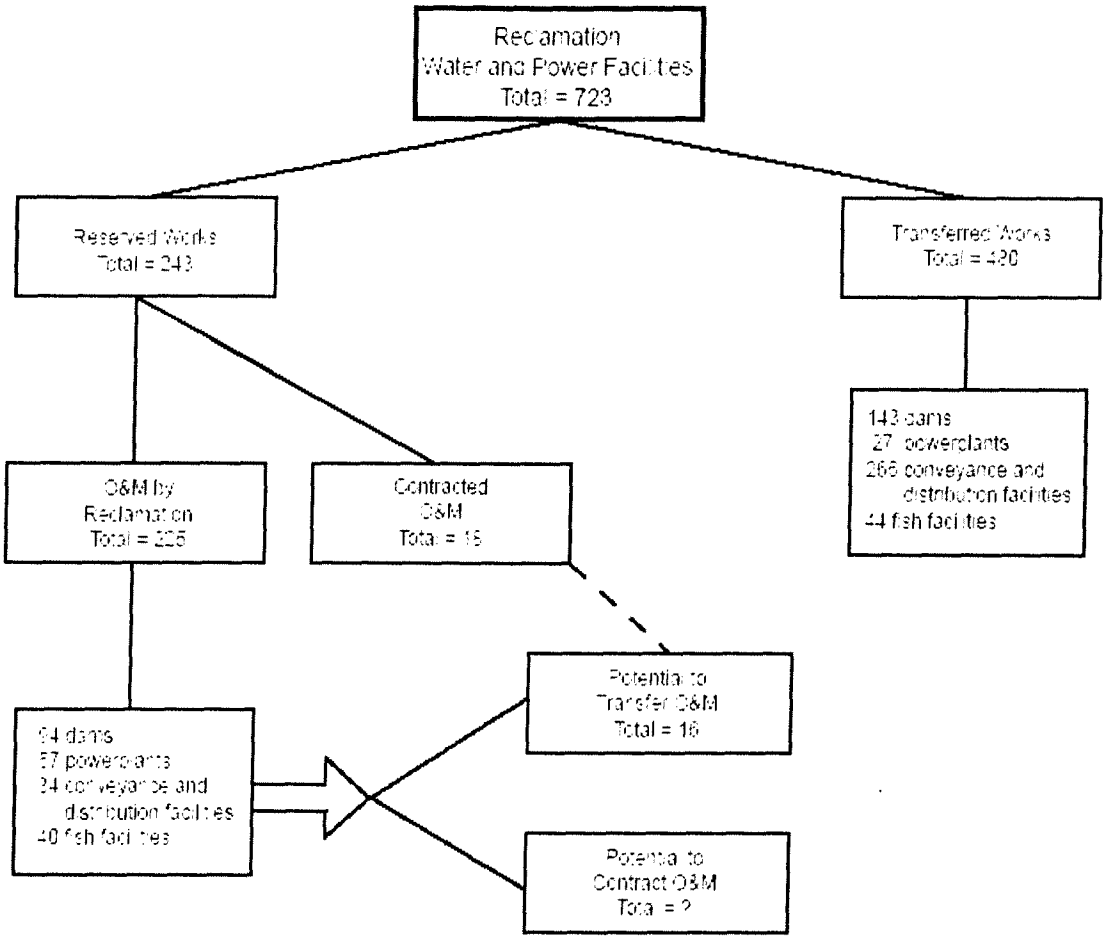

Figure 1.

Illustration of Reclamation's water and power Reserved Works and Transferred Works facilities.

Table 1

Facility Status – Transferred vs. Reserved

Reclamation Wide	Transferred	Reserved
Dams	143 (58%)	102 (42%)
Power Facilities	27 (32%)	58 (68%)
Water Conveyance and Distribution Facilities	266 (87%)	39 (13%)
Fish Facilities	44 (50%)	44 (50%)
Total	480 (66%)	243 (34%)

Table 2

Facility Status – Transferred Works

Region	PN	MP	LC	UC	GP	Total
Dams	34	19	10	46	34	143
Power Facilities	0	1	16	10	0	27
Water Conveyance and Distribution Facilities	57	61	33	52	63	266
Fish Facilities	42	1	0	0	1	44
Total Transferred Works	133	82	59	108	98	480
Percent Transferred	62%	66%	78%	78%	57%	66%

Table 3

Facility Status – Reserved Works

Region	PN	MP	LC	UC	GP	Total
Dams	24	20	4	11	43	102
Power Facilities	10	12	3	12	21	58
Water Conveyance and Distribution Facilities	8	5	10	6	10	39
Fish Facilities	38	5	0	1	0	44
Total Reserved Works	80	42	17	30	74	243
Percent Reserved	38%	34%	22%	22%	43%	34%

Note: A detailed summary of Reclamation facilities categorized by "Transferred Works" and "Reserved Works" is found in Appendix A

Benefits of O&M Transfer

A number of potential benefits, both to Reclamation and the project beneficiary, result from the transfer of O&M of project facilities. Several of these benefits are cited below which should be considered when a facility is being evaluated for transfer of O&M.

Benefits to Reclamation

- If Reclamation has been operating the facilities (reserved works) for some period of time, then it is possible that Reclamation staff can be reduced following the transfer. Expertise required to perform oversight of these facilities following O&M transfer may already exist, at least partially, in the responsible area office. Reclamation staff can perform efficient oversight of a number of transferred projects because of function overlap between the many projects.
- A reduction in staff resources could result in a reduction in the need for Federal appropriations for these facilities allowing Reclamation's appropriation to be used for other important O&M activities.
- Local water districts have other avenues to secure funding for rehabilitation of the project facilities as they age. These options include state loans, public bonding, and a variety of other financial instruments, which can provide greater cost effectiveness and reduce the need for Federal appropriations.

- For those few reserved works facilities where Reclamation is appropriating funds for the O&M of facilities and getting reimbursed for the beneficiary share of O&M, appropriations could be reduced to just the appropriated non- reimbursable share and the available budget used for other important Reclamation activities.

Benefits to Project Beneficiary

- The project beneficiary is in direct control of making day-to-day O&M decisions in a manner that is likely more efficient to their operations. They are able to prioritize and schedule the O&M work and associated costs within their available budget. This control generally provides the opportunity for more efficient and cost-effective O&M of the facilities.
- Transferring the O&M of these Federal projects allows the beneficiaries to be much more involved in the decision making process. They decide when and how the day-to-day O&M is performed.
- Since one of the District's functional responsibilities is to administer subscriptions of the water to the end user, being able to perform the day-to-day operation enables the district to be more efficient in making water deliveries. Their involvement with and understanding of the end users' issues facilitates better prioritization of O&M requirements.
- The project beneficiary may be able to streamline their structure and place employees in the location most likely to minimize costs. The beneficiary has the flexibility to procure work from outside contractors more quickly, with fewer procurement regulations.
- Beneficiary employees tend to stay with a project, often through retirement, which engenders a career-long interest in improving the quality of O&M performed on the project. Since they benefit from the project, employees have a vested interest in taking care of the project.

In summary, opportunities still exist for additional transfer of O&M. Consideration should be given to transferring Reclamation facilities to willing, interested, and capable project beneficiaries. As part of this consideration, potential benefits to both Reclamation and the project beneficiary should be fully explored. Transferring O&M, where appropriate, is the preferred method of operating and maintaining Reclamation facilities. Implementing the O&M transfer of some additional facilities may reduce the need for Reclamation appropriations. Reclamation and the beneficiary water district should continue to discuss and explore how each could benefit by transferring the O&M of appropriate project facilities.

AUTHORITIES/LAWS/POLICIES

Authorities/Reclamation Law

Reclamation law has long encouraged the transfer of operation and maintenance of Reclamation projects to our partner districts and water user associations.

The Reclamation Act of 1902 directed the Secretary of the Interior to pass the operation and management of irrigation works to the land owners to be maintained at their expense when payments for the major portion of the lands irrigated had been made. ***(Section 6, 32 Stat. 289, 43 U.S.C. 491, 498)***

The primary authority currently relied upon for O&M transfers is the ***Reclamation Extension Act of 1914 (38 Stat. 687; 43 U.S. 492, 499).*** The 1914 Act provides that whenever a water users' association or irrigation district requests, the Secretary is "authorized, in his discretion, to transfer...the care, operation, and maintenance of all or any part of the project works, subject to such rules and regulation as he may prescribe."

In addition, ***Subsection G of the Fact Finders' Act of 1924 (43 Stat. 702; 43 U.S.C. 500)*** required, under certain circumstances, the transfer of the operation and maintenance to a district in order to receive the revenue crediting benefits of the Act.

In 1954, Congress enacted legislation to further encourage O&M transfers to users. The statute expanded Reclamation's authority to include transfer of O&M of certain works to municipal corporations or other organizations to which water for municipal, domestic, or industrial use is furnished. In addition, Congress authorized the Secretary to transfer title to certain movable property when an organization assumed O&M, and "[i]n order to encourage the assumption by irrigation districts, municipalities, and water users' organizations of the operation and maintenance of works constructed to furnish or distribute a water supply..." authorized the use of certain appropriated funds to acquire moveable property for transfer. ***(Transfer of Title to Movable Property to Irrigation District of 1954 (68 Stat. 580) as amended by the Amend Movable Property Title Transfer Act of 1965 (79 Stat. 172; 43 U.S.C. 499a, 499b).***

Reclamation Policies

Reclamation also has issued Reclamation Manual Directives and Standards and supporting guidance that pertain to O&M transfers. These include the following:

Delegation of Authority to Negotiate and Execute Contracts for the Transfer of Operation, Maintenance, and Replacement of Project Facilities, memorandum dated January 19, 2001—This memorandum provided the Regional Directors authority to negotiate and execute contracts for the transfer of OM&R responsibilities.

Guidance for Negotiating and Executing Contracts for the Transfer of Operation, Maintenance, and Replacement of Project Facilities, memorandum dated June 25, 2001—These guidelines apply to situations where another entity has agreed to accept OM&R responsibility or where Reclamation shares responsibility to pay some of the O&M costs for single- or multi-purpose facilities. These guidelines state that the primary

purpose for the transfer of OM&R facilities is to gain both cost and operational efficiencies to the United States and to the contracting entity through local control.

(The above listed memorandum and guidelines are currently in the process of being converted to a Reclamation Manual Directive and Standard and will outline minimum requirements related to negotiating and executing contracts for the transfer of OM&R of project facilities.)

Transfer of Operation and Maintenance (O&M) Responsibility of Project Works (FAC 01-05)—Establishes procedures and requirements for transferring O&M of project works, including safety of dams (SOD) modifications from: construction status to Reclamation O&M status or construction status or Reclamation O&M status to water user organization O&M status.

O&M TRANSFER OPPORTUNITIES

Each Reclamation project has unique features generally outlined as part of the project authorization. The most common method to accomplish project O&M is to transfer O&M to the primary project beneficiary and/or repayment entity to perform the O&M responsibilities as identified in a formal O&M transfer agreement with Reclamation. The O&M entity is generally given very broad authority to perform many of Reclamation's responsibilities. Reclamation, as owner of the facility, remains accountable for certain responsibilities related to public safety, design/construction, land use, NEPA, ESA and historic preservation and cannot transfer those responsibilities. A transfer agreement defines the roles and responsibilities of both the operating entity and Reclamation. Additionally, Reclamation retains the ultimate responsibility for technical and policy oversight on essential government matters and adherence to project authorization documents. A non-Federal entity cannot authorize use of federal land and property interests. Reclamation continues to be responsible for Right-of-Use authorizations over federal land and easements. Reclamation must provide a level of oversight to ensure the projects are maintained to acceptable standards and reserves the right to take back O&M if the entity does not meet the requirements of the O&M transfer agreement.

Although Reclamation has successfully transferred O&M for a majority of its facilities and projects to the beneficiaries, additional opportunities do exist. The Team determined that asking local Area Managers, who have jurisdiction over facilities and projects within certain geographical areas, was the most accurate method to identify candidate facilities for further O&M transfer. These Area Managers have responsibilities that range from providing the O&M for reserved works to providing oversight of O&M activities on Transferred Works. Each Area Manager is responsible for understanding the Reclamation projects and facilities within their jurisdictions and for building relationships with those local project beneficiaries. The Team developed a questionnaire to inquire about potential O&M transfer opportunities from each Area Manager. The key questions

included in the questionnaire and a summary of the questions and answers provided by the Area Managers can be found in Appendix B.

In some cases, local entities have expressed an interest in performing the O&M of project facilities either through a transfer or contract mechanism, while in other cases, Reclamation believes the facilities may be good candidates for O&M transfer but to date no interest has been expressed by the local beneficiary. The following facilities or projects, listed by region, were identified by Area Managers as good candidates for transfer:

Upper Colorado
- Animas La-Plata Project (when completed)
- Deer Creek Powerplant

Great Plains
- Pactola Dam
- Deerfield Dam
- Nelson Dikes
- Fresno Dam

Mid Pacific
- Link River Dam
- Straits Drain
- Gerber Dam
- Clear Lake Dam
- Ady Headworks to Klamath Drainage District
- Red Bluff Diversion Dam
- Shasta Pumping Plant

Pacific Northwest
- North and Southside Canal Headworks at Minidoka Dam

Lower Colorado
- Drop 2 Reservoir (when completed)
- Central Arizona Project Indian distribution facilities (as completed)

The Team recommends that the Regional Directors and Area Managers engage in open dialogue with project beneficiaries in an effort to transfer the O&M of these projects or facilities under a formal transfer agreement.

Below are issues that should be considered by Reclamation when developing a formal transfer agreement. A more detailed discussion of these issues can be found in Appendix C.

- Appropriate level of oversight of transferred facilities
- Maintaining technical expertise within Reclamation

- Economic advantages
- Employee relations prior to and during transfer
- Direct contracting for O&M services as an interim step
- Reducing liability risk
- National Environmental Policy Act (NEPA), Endangered Species Act (ESA), and National Historic Preservation Act (NHPA) compliance
- Documenting condition of facilities

Certainly, in addition to evaluating the potential benefits to both Reclamation and to the beneficiary, an analysis of potential costs to both will also need to be undertaken. Such an analysis should take into consideration that costs may initially increase as significant institutional or organizational changes are implemented.

O&M CONTRACTING OPPORTUNITIES

Although the primary method for achieving project O&M is via a formal transfer agreement with the project beneficiary, this may not be achievable in all cases. Outsourcing through direct contracting of all or portions of the O&M to project beneficiaries can also be an effective method to perform project O&M when a formal O&M transfer is problematic or controversial. In cases where O&M of a facility is directly contracted to the beneficiary, Reclamation typically retains a more significant level of stewardship as compared to when the O&M is formally transferred to a beneficiary. Reclamation considers the formal transfer of O&M as transferring a degree of the stewardship responsibility through formation of a special relationship that can only be established pursuant to the statutory authorities in Reclamation law.

As shown on Figure 1., and as noted on the facility lists in Appendix A, Reclamation currently has 18 facilities that are operated by project beneficiaries under an O&M contract rather than a transfer agreement.

The Team did not identify any candidate facilities where contracting of O&M of an entire facility to a project beneficiary should be pursued. However, it should be recognized that during discussions to transfer O&M of facilities listed under the "O&M Transfer Opportunities" section, contracting for O&M should be fully explored and considered if a formal O&M transfer cannot be achieved.

Further, where Reclamation is providing day-to-day O&M on reserved works facilities, contracting of various O&M tasks is routinely practiced and has been very successful when expertise or specialized skills are required that are not readily available within the organization. Each O&M office is unique in its internal O&M capabilities and must determine when it is appropriate to contract an activity versus doing the work with Reclamation staff. These decisions are real time and consider such things as resource availability, the recurring nature of the task, capability of staff skill set, cost comparisons, and priorities. No attempt has been made to determine the percentage of work that is being contracted at facilities were Reclamation provides the day-to-day O&M activities.

The practice of contracting for certain tasks related to O&M of facilities is a common practice throughout the industry, including within Reclamation.

The Team recommends that each Area Office with responsibility for facility O&M (reserved works) continue to evaluate current practices in order to improve efficiency of its operations. Contracting for the sake of contracting, though, is not encouraged.

Below are issues that should be considered when contracting for O&M services, either with our partners or others. A more detailed discussion of these issues can be found in Appendix C and in *Managing for Excellence* Team 8 report.

- Level of oversight/quality assurance
- Maintaining technical expertise within Reclamation
- Employee relations prior to and during contracting
- Contracting method
- Economic advantages
- Expertise of contractor
- Nature or complexity of work
- Responsiveness to time-critical issues/operations
- Warranties
- Minimizing change orders
- National Environmental Policy Act (NEPA), Endangered Species Act (ESA), and National Historic Preservation Act (NHPA) compliance

The Team does not recommend that Reclamation change its views on subjecting O&M to A76 competitions. However, the O&M of reserved works could be subjected to a public-private competition in which Reclamation would compete with private and project beneficiaries to perform day-to-day O&M functions. This option and process is discussed at length in the *Managing for Excellence* Team 8's Report, and the reader is referred to that document for more details.

CONCLUSIONS AND RECOMMENDATIONS

During the course of Reclamation's existence, the O&M responsibility of almost two-thirds of its project facilities has been successfully transferred to project beneficiaries. Only a small percentage of Reclamation's facilities have not had O&M transferred or outsourced (contracted for O&M services) to some extent.

While transfer agreements remain the preferred method to outsource O&M to the project beneficiary, direct contracting for O&M services with project beneficiaries is currently being used successfully on 18 facilities.

Although Reclamation policy has been successful and will continue to be a priority for the agency, additional opportunities still exist to transfer O&M responsibility from Reclamation to willing, interested, and capable project beneficiaries. As part of this consideration, potential benefits to both Reclamation and the project beneficiary should be fully explored. Transferring O&M, where appropriate, is the preferred method of operating and maintaining Reclamation facilities. Implementing the O&M transfer of additional facilities may reduce the need for Reclamation funding for the transferred facilities and would allow the savings to be applied to other important O&M activities. Reclamation and the beneficiary water districts should continue to discuss and explore how each could benefit by transferring the O&M of appropriate project facilities.

As a result, the Team recommends the following:

1. Regional Directors and Area Managers should make an attempt to secure formal O&M transfer agreements for the 16 facilities or projects listed above subject to mutual agreement with project beneficiaries.

2. Regional Directors and Area Managers should look for opportunities to contract for O&M where deemed appropriate.

APPENDIX A

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Reserved Works (O&M)

Great Plains Region

	Project and feature	Initially completed	Transferred to O&M	Transfer to user scheduled
	COLORADO-BIG THOMPSON PROJECT			
	Estes Park Area:			
1,2	Marys Lake Dikes and Powerplant	1949,51	1951	No
3,4	Olympus Dam (includes Estes Powerplant)	1948,50	1950	No
	Foothills Area:			
5,6,7	Flatiron Dam (includes Flatiron and Big Thompson Powerplants)	1953,59	1953	No
8,9	Rattlesnake Dam (includes Pole Hill Powerplant)	1953,54	1953	No
10	Pole Hill Canal, Afterbay, and Tunnel	1952	1953	
11	Big Thompson Diversion Dam			
	Granby Area:			
12	Alva B. Adams Tunnel	1947	1947	No
	Green Mountain Area:			
13,14	Green Mountain Dam and Powerplant	1943	1943	No
	FRYINGPAN ARKANSAS PROJECT			
15	Pueblo Dam	1976	1976	No
16	Ruedi Dam	1968	1969	No
17	Sugar Loaf Dam and Dike	1968	1969	No
18,19	Mt. Elbert Forebay Dam & Powerplant	1979,81	1979	No
20	Twin Lakes Dam	1984	1984	No
21	West Slope Collection System	1971,77,81	1972,82	No
	KENDRICK PROJECT			
22,23	Alcova Dam and Powerplant	1938,55	1938	No
24,25	Seminoe Dam and Powerplant	1939	1939	No
26	Casper Canal Tunnel No. 1			
	LEADVILLE MINE DRAINAGE TUNNEL PROJECT			
27	Leadville Treatment Plant	1992	1992	No
	MILK RIVER PROJECT			
	Fresno Storage Division			
28	Fresno Dam	1939	1939	1/
	Malta Division			
29	Nelson Dikes	1915	1915	2/
	St. Mary Storage Division			
30	Lake Sherburne Dam	1921	1921	1/
31	St. Mary Canal System	1915	1915	1/

1/ Discussions continuing among Reclamation, irrigation districts, BIA, and Indian Tribes. Issues of endangered species, reserved water rights, rehabilitation of St. Mary Canal, and concerns of Blackfeet and Belknap Tribes need to be resolved.

2/ Discussions underway with Milk River Project Irrigation Districts on potential O&M transfer.

	Project and feature	Initially completed	Transferred to O&M	Transfer to user scheduled
	NORTH PLATTE PROJECT			
32,33	Guernsey Dam and Powerplant	1927	1927	No
34	Pathfinder Dam and Dike	1909	1909	No
	PICK-SLOAN MISSOURI BASIN PROGRAM			
	Bostwick Division			
35	Lovewell Dam	1957	1957	No
	Boysen Division			
	Boysen Unit			
36,37	Boysen Dam and Powerplant	1952	1953	No
	Buffalo Bill Modifications Unit			
38-41	Buffalo Bill Dam Modifications (Includes Buffalo Bill Powerplant, Spirit Mountain Powerplant, and Shoshone Powerplant, and Diamond Creek Dike, North Fork Dike, and South Fork Dike)	1992, 93	1992, 93	No
	Cheyenne Division			
	Keyhole Unit			
42	Keyhole Dam	1953	1953	No
	Rapid Valley Unit			
43	Pactola Dam	1957	1957	1/
	Frenchman-Cambridge Division			
	Cambridge and Red Willow Units			
44	Medicine Creek Dam	1947,49	1950	No
45	Red Willow Dam	1962	1962	No
	Frenchmen Unit			
46	Enders Dam	1946,50	1951	No
47	Frenchman Creek Stabilization	1974	1975	No
	Meeker-Driftwood Unit			
48	Trenton Dam	1950,53	1953	No
	Garrison Division			
	Garrison Diversion Unit			
49	Jamestown Dam	1953	1954	No
	Grand Division			
	Shadehill Unit			
50	Shadehill Dam and Dikes	1951	1953	No
	Heart Division			
	Dickinson Unit			
51	Dickinson Dam	1950	1950	No
	Heart Butte Unit			
52	Heart Butte Dam and Dike	1949	1949	No
	Helena-Great Falls Division			
	Canyon Ferry Unit			
53,54	Canyon Ferry Dam, Abatement Dikes, and Powerplant	1954,82	1955	No

1/ O&M contracted with City of Rapid City since 1995.

	Project and feature	Initially completed	Transferred to O&M	Transfer to user scheduled
	PICK-SLOAN MISSOURI BASIN PROGRAM - Continued			
	Kanaska Division			
55	Norton Dam	1962,64	1965	No
	Lower Bighorn Division			
	Yellowtail Unit			
56	Yellowtail Afterbay Dam	1966	1967	No
57,58	Yellowtail Dam and Powerplant	1966	1967	No
	Marias Division			
	Lower Marias Unit			
59	Tiber Dam and Dike	1955	1967	No
	Oregon Trail Division			
	Glendo Unit			
60	Fremont Canyon Powerplant	1961	1961	No
61	Glendo Dam, Dikes, and Powerplant	1959	1959	No
62	Gray Reef Dam	1961	1961	No
	Kortes Unit			
63,64	Kortes Dam and Powerplant	1951	1951	No
	Smoky Hill Division			
65	Cedar Bluff Dam	1950	1951	No
	Solomon Division			
	Glen Elder Unit			
66	Glen Elder Dam and Dikes	1964,68	1969	No
	Webster Unit			
67	Webster Dam	1956	1956	No
	Kirwin Unit			
68	Kirwin Dam	1955	1958	No
	Upper Republican Division			
	Armel Unit			
69	Bonny Dam	1948,51	1951	No
	Wind Division			
	Riverton Unit			
70	Pilot Butte Powerplant	1925	1925	No
	RAPID VALLEY PROJECT			
71	Deerfield Dam	1946	1946	1/
	SHOSHONE PROJECT			
72,73	Buffalo Bill Dam & Heart Mtn Powerplant (Portion of the dam not modified is under Shoshone Project; see Buffalo Bill Dam Modifications Unit, PSMBP, for modified portion)	1910,93	1922,93	No
74	Shoshone Canyon Conduit Division Works Spillway			
75	Shoshone Canyon Conduit Pressurized Section			

1/ O&M contracted with City of Rapid City since 1995.

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Transferred Works (O&M)

Great Plains Region

	Project and feature	Initially completed	Transferred to users
	ARBUCKLE PROJECT		
1	Arbuckle Dam and Dikes	1966	1968
2	Aqueduct System	1966	1968
	BUFFALO RAPIDS PROJECT		
3	Buffalo Rapids Project Board of Control System (includes pumping plants)	1940-50	1954
	BUFORD-TRENTON PROJECT		
4	Buford-Trenton Irrigation District System	1942	1955
	CANADIAN RIVER PROJECT		
5	Sanford Dam	1965	1968
	COLORADO-BIG THOMPSON PROJECT		
	Foothills Area:		
6	Carter Lake Dams	1952	1987
7	Horsetooth Dams	1949	1987
8	No. Colorado Water Conservancy District System	1956	1956
	Granby Area:		
9	Granby Dam and Dikes	1949,51	1986
10	Farr Pumping Plant & Granby Power Canal		
11	Shadow Mountain Dam	1947	1986
12	Willow Creek Dam (CO)	1953	1986
13	Willow Creek (CO) Pumping Plant		

	Project and feature	Initially completed	Transferred to users
	FRYINGPAN ARKANSAS PROJECT		
14	Fountain Valley System	1985	1985
15	Pueblo Fish Hatchery	1987,1988	1995
	HUNTLEY PROJECT		
16	Anita Dam	1937	1937
17	Huntley Project Irrigation District System	1907,08	1928
	INTAKE PROJECT		
18	Intake Irrigation District System (was previously named Lower Yellowstone Project Board of Control System)	1946	1946
	KENDRICK PROJECT		
19	Casper-Alcova Irrigation District System	1946	1958
	LOWER YELLOWSTONE PROJECT		
20	Lower Yellowstone Irrigation District No. 1 & 2 (previously named Lower Yellowstone Project Board of Control System)	1907,22	1932
	MCGEE CREEK PROJECT		
21	McGee Creek Dam	1989	1990
22	Aqueduct System	1988	1990
	MILK RIVER PROJECT		
	Chinook Division		
23	Paradise Diversion Dam	1966	1967
	Glasgow Division		
24	Glasgow Irrigation District System	1917	1954
	Malta Division		
25	Malta Irrigation District System	1910,46	1954
	MIRAGE FLATS PROJECT		
26	Box Butte Dam	1946	1951
27	Mirage Flats Irrigation District System	1945	1951

	Project and feature	Initially completed	Transferred to users
	MOUNTAIN PARK PROJECT		
28	Mountain Park Dam	1976	1977
29	Aqueduct System	1979	1979
	NORMAN PROJECT		
30	Norman Dam	1966	1966
31	Aqueduct System	1966	1966
	NORTH PLATTE PROJECT		
32	Lake Alice Dams	1912,13	1926
33	Minatare Dam	1915	1926
34	Farmers Irrigation District System		1926
	Fort Laramie Division		
35	Gering-Fort Laramie Irrigation District (Previously named Nebraska Carriage, Distribution, & Drainage System)	1918	1927
36	Goshen Irrigation District System (Previously named Wyoming CD&DS)	1918	1927
	Interstate Division		
37	Pathfinder Irrigation District System	1909	1926
	Northport Division		
38	Northport Irrigation District System	1922	1927
	NUECES RIVER PROJECT		
39	Choke Canyon Dam	1982	1983
	PICK-SLOAN MISSOURI BASIN PROGRAM		
	Belle Fourche Unit		
40	Belle Fourche Dam	1911	1949
41	Belle Fourche Irrigation District System	1904	1949
	Bighorn Basin Division		
	Hanover-Bluff Unit		
42	Highland-Hanover Irrigation District System	1957,69	1958,69
43	Upper Bluff Irrigation District System	1957	1958

	Project and feature	Initially completed	Transferred to users
	PICK-SLOAN MISSOURI BASIN PROGRAM – Continued		
	Bighorn Basin Division – Continued		
	Owl Creek Unit		
44	Anchor Dam	1960	1992
45	Anchor Dikes	1960	1992
46	Lucerne Pumping Plants	1956	1957
47	Owl Creek Irrigation District System (3.8 miles of canal)	1956	1957
	Bostwick Division		
	Courtland Unit		
48	Kansas-Bostwick Irrigation District System	1958	1958-62
	Franklin and Superior-Courtland Units		
49	Nebraska-Bostwick Irrigation District System	1952,57	1957,60
	Cheyenne Division		
	Angostura Unit		
50	Angostura Dam	1949	1968
51	Angostura Irrigation District System	1956	1968
	Frenchman-Cambridge Division		
	Cambridge and Red Willow Units		
52	Frenchman-Cambridge Irrigation District System (NE)	1950,57,64	1957,65
	Frenchmen Unit		
53	Frenchmen Valley Irrigation District System	1959,61	1961
54	H&RW Irrigation District System	1962	1963
	Meeker-Driftwood Unit		
55	Frenchman-Cambridge Irrigation District System (NE)	1957,58	1960
	Garrison Division		
	Garrison Diversion Unit		
56	Minot Extension	1977	1977
	Heart Division		
	Heart Butte Unit		
57	Western Heart River Irrigation System	1956	1958
	Helena-Great Falls Division		
	Helena Valley Unit		
58	Helena Valley Dam	1958	1975
59	Helena Valley Pumping Plant	1958	1991
60	Helena Valley Irrigation District System	1961	1975
	James Division		
	Oahe Unit		
61	James Diversion Dam	1964	1965
	Kanaska Division		
62	Almena Irrigation District System	1967	1968

	Project and feature	Initially completed	Transferred to users
	PICK-SLOAN MISSOURI BASIN PROGRAM - Continued		
	North Dakota Pumping Division		
	Fort Clark Unit		
63	Fort Clark Irrigation District System	1953	1968
	North Loup Division		
64	Davis Creek Dam	1990	1997
65	Virginia A. Smith (Calamus) Dam	1990	1997
66	Twin Loups Reclamation District System	1987	1987,97
	Sandhills Division		
	Ainsworth Unit		
67	Merritt Dam	1964	1967
68	Ainsworth Irrigation District System	1966	1967
	Solomon Division		
	Kirwin Unit		
69	Kirwin Irrigation District System	1958	1960
	Webster Unit		
70	Webster Irrigation District System	1961	1962
	South Dakota Pumping Division		
71	Gray Goose System	1978	1978
72	Hilltop System	1977	1977
	Three Forks Division		
	Crow Creek Pump Unit		
73	Toston Irrigation District System	1954	1970
	East Bench Unit		
74	Clark Canyon Dam	1964	1976
75	East Bench Irrigation District System	1964	1976
	Wind Division		
	Riverton Unit		
76	Bull Lake Dam	1938	1951
77	Pilot Butte Dams	1926	1951
78	Midvale Irrigation District System (incl. Wind River DD)	1925,50	1951,71
	Yellowstone Division		
	Savage Unit		
79	Savage Irrigation District System (Previously named Lower Yellowstone Board of Control System)	1949	1950
	SAN ANGELO PROJECT		
80	Twin Buttes Dam	1963	1966
81	Tom Green County WC&ID No. 1 System	1963	1973

	Project and feature	Initially completed	Transferred to users
	SHOSHONE PROJECT		
	Frannie Division		
82	Deaver Dam	1918	1930
83	Deaver Irrigation District System	1917	1930
	Garland Division		
84	Shoshone Irrigation District System	1908	1927
	Heart Mountain Division		
85	Heart Mountain Irrigation District System (includes free-flow section of Shoshone Canyon Conduit, the Division Works, and the Shoshone River Siphon)	1947	1960
	Willwood Division		
86	Willwood Irrigation District System	1930	1950
	SUN RIVER PROJECT		
87	Gibson Dam	1929	1931
	Fort Shaw Division		
88	Willow Creek Dam and Dikes (MT)	1911	1927
89	Fort Shaw Irrigation District System	1908	1927
	Greenfields Division		
90	Pishkun Dikes	1931	1931
91	Greenfields Irrigation District System	1920	1931
	W. C. AUSTIN PROJECT		
92	Altus Dam and Dikes	1945	1971
93	Lugert-Altus Irrigation District System	1949	1952
	WASHITA BASIN PROJECT		
94	Fort Cobb Dam	1959	1962
95	Anadarko Aqueduct	1959	1962
96	Foss Dam	1961	1965
97	Foss Aqueduct	1963	1965
	WICHITA PROJECT		
98	Cheney Dam	1965	1965

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Reserved Works (O&M)

Lower Colorado Region

	Project and feature	Initially completed	Transferred to O&M	Transfer to user scheduled
	BOULDER CANYON PROJECT			
1,2	Hoover Dam, Spillway Bridge & Powerplant	1936	1936	No*
	BUREAU OF INDIAN AFFAIRS			
3	Headgate Rock Dam	1941	1988	No 1/
	COLORADO RIVER BASIN SALINITY CONTROL PROJECT			
	Title I			
4	Protective and Regulatory Pumping Unit	1979	1983	No
5	Bypass Drain – USA	1979	1980	No
	Title II			
6	Pittman Bypass Pipeline	1985	1989	No
	COLORADO RIVER FRONT WORK AND LEVEE SYSTEM			
7	Channelization and Topock Marsh Facilities	1966,67	1966	No 2/
8	Main Outlet Drain	1962	1962	No
9	South Gila Valley Drainage System	1961	1972	3/
10	Yuma Valley Ground Water Recovery Facilities	1967	1968	3/
	DELIVERY OF WATER TO MEXICO			
11	Main Outlet Drain Extension	1979	1979	No
	PARKER-DAVIS PROJECT			
12,13	Davis Dam, Forebay Channel Bridge & Powerplant	1950	1950	No
14,15	Parker Dam and Powerplant	1938	1938	No

* "No" indicates multipurpose facility or facility with no responsible operating entity identifiable.

1/ Operated by Reclamation under interagency agreement with BIA.
2/ Jointly operated by Reclamation and Fish and Wildlife Service.
3/ Per 6/19/98 LAN message from Jim Bayne, BCOO-4250, in order to transfer would have to break contract.

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Transferred Works (O&M)

Lower Colorado Region

	Project and feature	Initially completed	Transferred to users
	BOULDER CANYON PROJECT		
1	Imperial Diversion Dam	1938,50	1938,50
2	Imperial Irrigation District System (includes All- American Canal)	1940	1940
3	Coachella Valley Irrigation District System	1948,79,80	1948,79,81
	CENTRAL ARIZONA PROJECT		
4	New Waddell Dam	1992	1996
5	Central Arizona Project Aqueducts	1987	1993
6	Central Arizona Project Pumping Plants	1987	1993
7	Fountain Hills Water Delivery System (Chapparal City Water Company)	1986	1986
8	Central Arizona Irrigation and Drainage District System	1986	1986
9	Joint Distribution System (formerly Queen Creek System, Phase I)	1987	1987
10	Reach 11 Dikes	1977/93	1993
11	Maricopa-Stanfield Irrigation and Drainage District System	1987,92	1987,92
12	New Magma Irrigation and Drainage District System	1986	1986
13	HoHoKam Irrigation and Drainage District System	1988	1988
14	Tonopah Irrigation District System	1986	1986
15	CAP Headquarters Complex	1993	1993
16	Gila River Farms	1987	
17	Ft. McDowell Indian System		
	COLORADO RIVER BASIN SALINITY CONTROL PROJECT Title 1		
18	Bypass Drain – Mexico	1977	1977
	COLORADO RIVER FRONT WORK AND LEVEE SYSTEM		
19	Senator Wash Dam and Pump-Generating Plant	1967	1982
	GILA PROJECT		
20	Gila Gravity Main Canal	1943	1982
21	Wellton-Mohawk Pumping Plants	1953	1959
22	Wellton-Mohawk Canal System	1953	1955,58
23	Drainage Wells and Drain Carriage System	1964	1964
24	Yuma Mesa Pumping Plant	1943	1961
25	Yuma Mesa Carriage, Distribution, and Drainage System	1941	1959
26	South Gila Carriage, Distribution, and Drainage System	1966	1973
	LOWER COLORADO WATER SUPPLY PROJECT		
27	Production Wells No. 1 and 2	2004	2004

	Project and feature	Initially completed	Transferred to users
	PALO VERDE DIVERSION PROJECT		
28	Palo Verde Diversion Dam	1957	1957
	SALT RIVER PROJECT		
29	Bartlett Dam	1939	1939
30	CC Cragin Dam (formerly Blue Ridge Dam)		2005
31	Granite Reef Diversion Dam	1908	1917
32	Horse Mesa Dam	1927, 37, 99	1927, 37
33	Horseshoe Dam	1946	1946
34	Mormon Flat Dam	1926-38	1926
35	Stewart Mountain Dam	1930-36	1930
36	Theodore Roosevelt Dam & Bridges	1909, 11, 36	1917
37	Salt River Valley Water Users' Assoc. System	1907	1917
38	Power Canal Diversion Dam	1906, 89	1989
39	Salt River Pima Maricopa Indian Community System		
	YUMA AUXILIARY PROJECT		
40	Unit B Irrigation System	1922	1960
	YUMA PROJECT		
41	Laguna Diversion Dam	1909, 48	1982
42	Reservation Division System	1909	1981, 83
43	Yuma County Water Users System	1909	1951

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Reserved Works (O&M)

Mid-Pacific Region

	Project and feature	Initially completed	Transferred to O&M	Transfer to user scheduled
	CACHUMA PROJECT			
1	Bradbury Dam	1953	1956	No
	CENTRAL VALLEY PROJECT			
	American River Division			
	Auburn-Folsom South Unit			
2	Folsom South Canal	1973	1973	No
	Folsom Unit			
3,4	Folsom Dam, Dikes, and Powerplant	1956	1956	No
5,6	Nimbus Dam and Powerplant	1956	1956	No
7	Nimbus Fish Hatchery	1956	1956	No 1/
	Delta Division			
8	Delta Cross Channel	1951	1952	No 2/
9	Tracy Fish Collecting Facilities	1957	1958	No 3/
	East Side Division			
	New Melones Unit			
10,11	New Melones Dam and Powerplant	1979	1979	No
	Friant Division			
12	Columbia-Mowry Relift Facilities	1953,63	1963	No
13	Friant Dam	1942	1951	No
	Sacramento River Division			
	Sacramento Canals Unit			
14	Red Bluff Diversion Dam	1966	1966	
15	Tehama-Colusa Fish Facilities	1971	1971	No 4/
	San Felipe Division			
16	San Justo Dam	1988	1988	5/

1/O&M contracted with California Department of Fish and Game.
2/ O&M contracted with San Luis and Delta-Mendota Water Authority
3/ Preventive maintenance and emergency repairs contracted with San Luis and Delta-Mendota Water Authority.
4/ Operated jointly by Fish and Wildlife Service and USBR.
5/ "Informally" operated and maintained by the San Benito County Water District.

	Project and feature	Initially Completed	Transferred to O&M	Transfer to user scheduled
	CENTRAL VALLEY PROJECT - Continued			
	Shasta Division			
17,18	Keswick Dam and Powerplant	1950	1951	No
19,20	Shasta Dam and Powerplant	1944	1952	No
21	Coleman National Fish Hatchery			No 1/
	Trinity River Division			
22	Buckhorn Dam	1992	1992	No
23	Judge Francis Carr Powerplant	1964	1970	No
24,25	Lewiston Dam and Powerplant	1964	1964	No
26	Spring Creek Debris Dam	1964	1964	No
27	Spring Creek Power Facilities	1964	1964	No
28,29	Trinity Dam and Powerplant	1964	1964	No
30	Trinity River Fish Hatchery	1964	1964	No 2/
31	Clair A. Hill Whiskeytown Dam	1964	1964	No
	KLAMATH PROJECT			
	Langell Valley Division			
32	Gerber Dam	1925	1925	No 3/
	Main Division			
33	Link River Dam	1921	1921	No 4/
	Upper Lost River Division			
34	Clear Lake Dam and Dike	1910	1910	No 3/
	Reserved Works Division			
35	Reserved Works	1910	1951	No 5/
	NEWLANDS PROJECT			
	Truckee Division			
36	Lake Tahoe Dam	1913	1913,2000	6/
	WASHOE PROJECT			
	Stampede Division			
37	Marble Bluff Dam	1975	1975	No
38	Prosser Creek Dam	1962	1962	No
39,40	Stampede Dam, Dike, and Powerplant	1970	1970	No

1/ Reclamation pays the Fish and Wildlife Service to perform O&M.
2/ O&M contracted with California Department of Fish and Game.
3/ O&M contracted with Langell Valley Irrigation District.
4/ O&M contracted with Pacific Corp
5/ Excluding Area F; Area F was transferred in 1981
6/ Effective February 1, 2000, Reclamation exercised a provision in the Operation and Maintenance Contract with the Truckee-Carson Irrigation District and took back/assumed responsibility for the operation and maintenance of Lake Tahoe Dam.

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Transferred Works (O&M)

Mid-Pacific Region

	Project and feature	Initially completed	Transferred to users
	CACHUMA PROJECT		
1	South Coast Conduit System	1952,56	1956
2	Lauro Dam	1952,56	1956
3	Carpenteria Dam	1952,56	1956
4	Ortega Dam	1952,56	1956
5	Glen Anne Dam	1952,56	1956
6	Tecolote Tunnel	1957	1957
7	Goleta County Water District System	1956	1956
8	Summerland County Water District System	1956	1956
	CENTRAL VALLEY PROJECT		
	American River Division		
	Delta Division		
9	Contra Costa Canal	1948,57,72	1972
10	Contra Loma Dam	1969	1972
11	Martinez Dam	1948	1972
12	Delta-Mendota Canal	1951	1998
13	Tracy Pumping Plant	1951	1998
14	Plain View Water District System	1954	1955
	Friant Division		
15	Madera Canal	1944	1998
16	Friant-Kern Canal	1949	1998
17	Delano-Earlimart Irrigation District System	1956	1957
18	Exeter Irrigation District System	1956	1957
19	Ivanhoe Irrigation District System	1955	1956
20	Lindmore Irrigation District System	1955	1956
21	Lindsay-Strathmore Irrigation District System	1953	1954
22	Shafter-Wasco Irrigation District System	1958	1959
23	Southern San Joaquin Municipal Water District System	1956	1957
24	Stone Corral Irrigation District System	1962	1962
25	Tea Pot Dome Water District System	1961	1962
26	Madera Irrigation District	1955	1956

	Project and feature	Initially completed	Transferred to users
	CENTRAL VALLEY PROJECT – Continued		
	Sacramento River Division		
	Sacramento Canals Unit		
27	Corning Canal System	1959,68	1996
28	Funks Dam	1980	1996
29	Tehama-Colusa Canal	1973,75,82	1996
30	County of Colusa Pumping Plants	1986	1989
31	Colusa County Water District System	1985	1985
32	Corning Water District System	1966	1966
33	Dunnigan Water District System	1983	1983
34	Orland-Artois Water District System, Unit 1	1981	1985
35	Glide System	1983	1983 1/
36	Kanawha System	1982	1982 1/
37	Westside System	1985	1986 1/
	San Felipe Division		
38	Pacheco Pumping Plant	1987	1987
39	San Benito System	1988	
40	Santa Clara System (Tunnel & Conduit)	1987	1987
41	Pacheco Conduit	1987	1987
42	Coyote Pumping Plant		
	Shasta Division		
43	Shasta Dam Area Public Utility District System	1987	1990
44	Toyon Pipeline		
	Trinity River Division		
45	Bella Vista Water District System	1967	1967
46	Muletown Conduit		
	West San Joaquin Division		
47	B. F. Sisk (San Luis) Dam	1967	1972 2/
48	Gianelli Pumping-Generating Plant	1967	1972 2/
49	Little Panoche Detention Dam	1966	1972 2/
50	Los Banos Detention Dam	1966	1972 2/
51	O'Neill Dam and Dike	1967	1972 2/
52	San Luis Canal	1965,67	1972 2/
53	Dos Amigos Pumping Plant	1965,67	1972 2/
54	O'Neill Pumping/Generating Plant	1967	1998
55	Pleasant Valley Pumping Plant	1970,73	1971,73
56	Coalinga Canal	1970,73	1971,73
57	Panoche Water District System	1977	1977
58	San Luis Drain	1967	1998
59	San Luis Water District System	1981	1981
60	Westlands Water District System	1981	1981

1/ Distribution System Loan Act loan paid out but USBR still holds title to canal side turnouts and pumping plants which are O&Med by the district.

2/ Considered joint-use facilities. California Department of Water resources performs O&M and pays 55% of O&M costs and Reclamation pays 45% of O&M costs. Approximately 50% of Reclamation's share is provided by water users in advance. Reclamation has title. O&M transferred by agreement.

	Project and feature	Initially completed	Transferred to users
	HUMBOLDT PROJECT		
61	Rye Patch Dam	1936	1941
62	Pershing County Water Conservation District System	1936,39	1941
	KLAMATH PROJECT		
	Langell Valley Division		
63	Langell Valley Irrigation District System	1923	1926
	Main Division		
64	Klamath Irrigation District System	1955	1954
	Pumping Division		
65	Shasta View Irrigation District System	1975	1989
	Reserved Works Division		
66	Klamath Project Area F	1910	1981
	Tule Lake Division		
67	Tulelake Irrigation District System	1921	1957
	NEWLANDS PROJECT		
	Carson Division		
68	Lahontan Dam	1915	1926,85
69	Truckee-Carson Irrigation District System	1915	1926,85
	ORLAND PROJECT		
70	East Park Dam and Dikes	1910	1954
71	Stony Gorge Dam	1928	1954,86
72	Orland Water Users Association System	1914	1954
	PUBLIC LAW 130 PROJECTS		
73	Proberta Water District System	1963	1963 1/

1/ Distribution System Loan Act loan paid out but USBR still holds title to canal side turnouts and pumping plants which are O&Med by the district.

	Project and feature	Initially completed	Transferred to users
	SANTA MARIA PROJECT		
74	Twitchell Dam	1959	1959
	SOLANO PROJECT		
75	Monticello Dam	1957	1996
76	Putah Diversion Dam	1957	1996
77	Putah South Canal	1959	1999
78	Solano County Water Agency System	1959	1959
	TRUCKEE STORAGE PROJECT		
79	Boca Dam	1939	1942
	VENTURA RIVER PROJECT		
80	Casitas Dam and Dike	1959	1959
81	Casitas Municipal Water District System	1959	1959
	WASHOE PROJECT		
82	Pyramid Lake Fishway		

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Reserved Works (O&M)

Pacific Northwest Region

	Project and feature	Initially completed	Transferred to O&M	Transfer to user scheduled
	BOISE PROJECT			
1,2	Anderson Ranch Dam and Powerplant	1950	1950	No
	Arrowrock Division			
3	Arrowrock Dam	1915	1915	No
4	Boise River Diversion Dam Powerplant	1912	1909	No
	Payette Division			
5,6	Black Canyon Div. Dam and Powerplant	1924	1924	No
7	Cascade Dam	1948	1948	No
8	Deadwood Dam	1931	1931	No
	COLUMBIA BASIN PROJECT			
9	Dry Falls Dam	1949	1952	No
10,11	Grand Coulee Dam and Powerplant	1941	1941	No
12,13	North Dam and Feeder Canal (includes Grand Coulee Pump-Generating Plant)	1954	1954	No
14	O'Sullivan Dam	1949	1952	No
15	Pinto Dam	1948	1952	No
16	Burbank Pumping Plant #1 Fishscreen	1993	1998	Yes
17	Burbank Pumping Plant #1 Fishscreen	2002	2003	Yes
18	Burbank Pumping Plant #3 Fishscreen	2002	2003	Yes
	CROOKED RIVER PROJECT			
19	Arthur R. Bowman Dam	1961	1962	No 1/
	HUNGRY HORSE PROJECT			
20,21	Hungry Horse Dam and Powerplant	1953	1954	No
	MINIDOKA PROJECT			
22	American Falls Dam Replacement	1978	1980	No
23	Jackson Lake Dam & Spillway Bridge	1911,16	1911,93	No
24,25	Minidoka Dam and Powerplant	1906	1906	No
	PALISADES PROJECT			
26,27	Palisades Dam and Powerplant	1957	1958	No
	RIRIE PROJECT			
28	Ririe Dam	1976	1976	No

1/ O&M performed under contract by Ochoco Irrigation District.

	Project and feature	Initially completed	Transferred to O&M	Transfer to user scheduled
	ROGUE RIVER BASIN PROJECT			
	Talent Division			
29	Green Springs Powerplant	1960	1961	No
	TUALATIN PROJECT			
30	Scoggins Dam	1975	1976	No 1/
	UMATILLA PROJECT			
	South Division			
31	McKay Dam	1926	1927	No
	Umatilla River Basin Fish Facilities			
32	McKay Fish Barrier/Screen	1994	1994	No
33	WEID Pumping Plant	1993		
34	Umatilla Project Phase II Water Exchange Facilities:			
	Columbia River Pumping Plant	1993	1993	No
	Cold Springs Pumping Plant	1996	1996	No
	Echo Pumping Plant and Pipeline	1999	1999	No
	Columbia-Cold Springs Canal	1995	1995	No
	Stanfield Relift Pumping Plant	1998	1998	No
	YAKIMA PROJECT			
	Kennewick Division			
35,36	Prosser Diversion Dam and Chandler Power Canal (includes Chandler Pwrplt)	1904,56	1957	No
	Roza Division			
37,38	Roza Diversion Dam/Power Canal (includes Roza Powerplant)	1939	1960	No
	Storage Division			
39	Bumping Lake Dam	1910	1910	No
40	Cle Elum Dam	1933	1933	No
41	Clear Creek Dam	1992	1993	No
42	Kachess Dam	1912	1912	No
43	Keechelus Dam	1917	1917	No
44	Tieton Dam	1925	1925	No
	Yakima Fish Facilities & Protective Facilities			
45	Sunnyside Screens	1985	1985	2/
46	Wapato Screens	1986	1986	2/
47	Roza Screens	1988	1988	2/
48	Roza Adult Trap and Collection Facility	1994	1994	2/
49	Chandler Fish Screen Facility	1987	1987	2/
50	Chandler Juvenile Evaluation Facility	1989	1989	2/
51	Kittitas Screens	1989	1989	2/
52	Bruton Fish Screen & Ladder Facilities	1989	1998	2/

1/ O&M performed under contract by Tualatin Valley Irrigation District.

2/ USBR responsible for maintenance; day-to-day activities contracted with selected irrigation districts. Facilities have not been transferred nor will they be.

	Project and feature	Initially completed	Transferred to O&M	Transfer to user scheduled
	YAKIMA PROJECT - Continued			
	Yakima Fish Facilities & Protective Facilities - Continued			
53	Toppenish/Satus Fish Screen & Ladder	1986	1986	1/
54	Toppenish Creek Fish Screen & Ladder	1987	1987	1/
55	Richland Screens	1985	1985	1/
56	Roza Ladder	1985	1985	1/
57	Wapato East Branch Ladders	1985	1985	1/
58	Sunnyside Ladders	1985	1990	1/
59	Knudson Screens	1985	1990	1/
60	Westside Screens	1989	1990	1/
61	Taneum Screens	1989	1990	1/
62	Taneum Ladder	1989	1990	1/
63	Naches/Cowiche Ladders	1989	1990	1/
64	Wanawish Left Ladder 2/	1989	1990	1/
65	Wanawish Right Fish Ladder 2/	1989	1990	1/
66	Knudson Fish Screen Facility	1991	1991	1/
67	Chandler Screens	1987	1987	1/
68	Easton Ladder	1989	1989	1/
69	Prosser Fish Ladders & Right Adult Trap	1987	1987	1/
70	Town Fish Ladder	1989	1989	1/
71	Town Fish Screen Facility	1989	1989	1/
72	Marion Drain Fish Ladder	1988	1988	1/
73	Columbia Screens	1989	1989	1/
74	Roza Wasteway Barrier	1989	1989	1/
75	Wapato West Branch Ladder	1989	1989	1/
76	City of Yakima Fish Screen Facility	1991	1991	1/
77	Clear Creek Ladders (Phase I)	1994	1994	1/
78	Yakima Field Office & Maintenance Facility (Phase I)			1/

1/ USBR responsible for maintenance; day-to-day activities contracted with selected irrigation districts. Facilities have not been transferred nor will they be.
2/ Renamed from Horn Rapids Left and Right.

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Transferred Works (O&M)

Pacific Northwest Region

	Project and feature	Initially completed	Transferred to users
	ARNOLD PROJECT		
1	Arnold Irrigation District System	1949	1949
	AVONDALE PROJECT		
2	Avondale Irrigation District System	1955	1955
	BAKER PROJECT		
	Lower Division		
3	Thief Valley Dam	1932	1932
	Upper Division		
4	Mason Dam	1968	1968
5	Baker Valley Irrigation District Syst	1968	1968
6	Lilley Pump Fish Screen	2001	2001
7	Lilley Fish Ladder	2002	2002
	BITTER ROOT PROJECT		
8	Como Dam	1910,54,67,95	1910
9	Bitter Root Irrigation District System	1910	1910
	BOISE PROJECT		
	Arrowrock Division		
10	Deer Flat Dams	1911,91,95	1926,92,95
11	Hubbard Dam	1912	1926
12	Boise River Diversion Dam	1908	1992
13	Boise Project Board of Control System	1906	1926
	Payette Division		
14	Black Canyon Irrigation District Syst	1922,39	1922,55
	BURNT RIVER PROJECT		
15	Unity Dam	1938	1938
	CHIEF JOSEPH DAM PROJECT		
	Chelan Division		
16	Lake Chelan Reclamation District Syst	1976	1976
	Foster Creek Division		
17	Brewster Flat System	1958	1959
18	Brewster Pump Fish Screen	1999	1999
19	Bridgeport Bar System	1958	1959

	Project and feature	Initially Completed	Transferred to users
	CHIEF JOSEPH DAM PROJECT - continued		
	Greater Wenatchee Division		
	Brays Landing, East, and Howard Flat Units		
20	Greater Wenatchee Irrigation Syst.	1965	1973
21	East Unit Pump Fish Screen	1998	1998
	Okanogan-Similkameen Division		
22	Whitestone Reclamation District System	1975	1976
	COLUMBIA BASIN PROJECT		
	Carriage, Distribution, and Drainage Systems		
23	East System	1948	1969
24	Quincy System	1948	1969
25	South System	1948	1969
26	Project Reserved Works	1948	1969
	CRESCENT LAKE DAM PROJECT		
27	Crescent Lake Dam	1956	1956
28	Tumalo Irrigation District System	1978	1978
	CROOKED RIVER PROJECT		
29	Ochoco Dam	1919,49,95	1949
30	Ochoco Irrigation District System	1962,82	1970
29	Crooked River Diversion Fish Screen & Rock Weir	2001	2001
	DALTON GARDENS PROJECT		
31	Dalton Gardens Irrigation District Syst	1955	1963
	DESCHUTES PROJECT		
	Crane Prairie Storage Division		
32	Crane Prairie Dam	1940	1940
33	Central Oregon Irrigation District System	1972	1973
	North Unit		
34	Haystack Dam	1957	1959
35	Wickiup Dam and East Dike	1949	1949
36	North Unit Irrigation District System	1946	1955
	FRENCHTOWN PROJECT		
37	Frenchtown Irrigation District System	1937	1937
	GRANTS PASS PROJECT		
38	Savage Rapids Diversion Dam	1955	1955

	Project and feature	Initially completed	Transferred to users
	LEWISTON ORCHARDS PROJECT		
39	Reservoir A Dam	1906,51,99	1952
40	Soldiers Meadow Dam	1923,87	1989
41	Lewiston Orchards Irrigation District System	1906,51	1952
	LITTLE WOOD RIVER PROJECT		
42	Little Wood River Dam	1960	1961
	MANN CREEK PROJECT		
43	Mann Creek Dam	1967	1969
	MICHAUD FLATS PROJECT		
44	Falls Irrigation District System	1958	1961
	MINIDOKA PROJECT		
	Gooding Division		
45	American Falls Reservoir District No. 2 System	1931,49	1933,49
	Gravity Division		
46	Minidoka Irrigation District System	1907	1917
	North Side Pumping Division		
47	A&B Irrigation District System	1952-59	1966
	Upper Snake River Division		
48	Grassy Lake Dam	1937,39	1996
49	Island Park Dam	1938,85,96	1996
	MISSOULA VALLEY PROJECT		
50	Big Flat Irrigation District System	1949	1955
	OKANOGAN PROJECT		
51	Conconully Dam	1910-20	1910
52	Salmon Lake Dam	1921	1921
53	Okanogan Irrigation District System	1917	1928
54	Salmon Creek Diversion Fish Screen and Ladder	2000	2000
55	Shell Rock Pump Fish Screen	2000	2001
	OWYHEE PROJECT		
56	Owhyee Dam	1932	1955
	Dead Ox Flat and Mitchell Butte Division		
57	Owyhee Irrigation District System	1935	1952
	Succor Creek Division		
58	Owyhee So. Board of Control System	1935	1952

	Project and feature	Initially completed	Transferred to users
	RATHDRUM PRAIRIE PROJECT		
	Eastern Division		
59	Hayden Lake Irrigation District System	1906,46	1959
	Prairie Division		
60	East Greenacres Unit System	1976	1976
	ROGUE RIVER BASIN PROJECT		
	Rogue River Fish Passage and Protective Facilities		
61	Antelope Creek Fish Ladder	1997	1998
62	Antelope Creek Fish Screen	1998	1998
63	Oak Street Diversion Dam Fish Ladder	1999	1999
64	Oak Street Diversion Dam Fishscreen	1999	1999
65	Phoenix Diversion Fish Screen	1999	1999
66	Phoenix Diversion Dam Fish Ladders	2000	2000
	Talent Division		
67	Agate Dam	1966	1966
68	Emigrant Dam	1924,60	1961
69	Fish Lake Dam	1956,96	1956
70	Fourmile Lake Dam	1956	1956
71	Howard Prairie Dam	1959	1961
72	Hyatt Dam	1961	1961
73	Keene Creek Dam	1959	1961
74	Medford Irrigation District System	1956	1956
75	Rogue River Valley Irrigation District System	1960	1961
76	Talent Irrigation District System	1959	1961
77	Joint Works		
	SPOKANE VALLEY PROJECT		
78	Consolidated Irrigation District 19 System	1967	1968
	THE DALLAS PROJECT		
79	The Dalles Irrigation District System	1965	1965
	TUALATIN PROJECT		
80	Tualatin Valley Irrigation District System	1976,79	1976,79
81	Patton Valley Pump Fish Screen	2001	2001
	UMATILLA PROJECT		
	East Division		
82	Cold Springs Dam	1908,96	1926
83	Hermiston Irrigation District Syst.	1908	1926

	Project and feature	Initially completed	Transferred to users
	UMATILLA PROJECT - Continued		
	West Division		
84	West Extension Irrigation District System	1914,16	1926
	VALE PROJECT		
85	Agency Valley Dam	1935	1955
86	Bully Creek Dam	1963	1965
87	Warm Springs Dam	1919,30	1949
88	Vale Oregon Irrigation District System	1929,30	1949
	WAPINITIA PROJECT		
	Juniper Division		
	Wasco Dam	1959,99	1959
	YAKIMA PROJECT		
	Kennewick Division		
89	Kennewick Irrigation District System	1956	1958
	Kittitas Division		
90	Easton Diversion Dam	1925	1960
91	Yakima River Pressure Tunnel	1931	1934
92	Kittitas Reclamation District System	1934	1934
93	Cascade Irrigation District System	1975	1978
	Roza Division		
94	Roza Irrigation District System	1941	1961
	Sunnyside Division		
95	Sunnyside Valley ID & Board of Control	1907	1945,59
96	Outlook Irrigation District	1907	1945,59
97	Granger Irrigation District	1907	1945,59
98	Grandview Irrigation District	1907	1945,59
99	Snipes Mountain Irrigation District	1907	1945,59
100	Benton Irrigation District	1907	1949,56
	Tieton Division		
101	Yakima-Tieton Irrigation District	1912,87	1947
102	French Canyon Dam	1986	1987
	Yakima Fish Facilities & Protective Facilities		
103	Yakima-Tieton Screens (Phase II)	1997	1997
104	Naches/Cowiche Fish Screens (Phase II)	1992	1992
105	New Cascade Canal Fish Screens (Phase II)	1993	1993
106	Congdon Fish Screen Facility (Phase II)	1994	1994
107	Snipes/Allen Fish Screens (Phase II)	1993	1993
108	Taylor Screens (Phase II)	1994	1994
109	Fruitvale Fish Screens (Phase II)	1996	1996
110	Naches-Selah Fish Screens (Phase II)	1996	1996
111	Gleed Ditch Screens (Phase II)	1993	1993
112	Lower WIP Screens/Ladders (Phase II)	1993	1993
113	Toppenish Pump Screens (Phase II)	1995	1995
114	Kelley/Lowrey Screens (Phase II)	1994	1994
115	Bachelor/Hatton Screens (Phase II)	1994	1994

	Project and feature	Initially completed	Transferred to users
116	Bachelor Creek Fish Barrier (Phase II)	1994	1994
117	Union Gap Screens (Phase II)	1997	1997
118	Clark Screens (Phase II)	1997	1997
119	WIP Upper Screens (Phase II)	1997	1997
120	Wilson Creek/Bull Ditch Screen Facility (Phase II)	2001	2001
121	Lindsey Screens (Phase II)	1997	1997
122	Ellensburg Mill Screens (Phase II)	1997	1997
123	Old Union Screens (Phase II)	1998	1998
124	Younger Screens (Phase II)	1998	1998
125	John Cox Screens (Phase II)	1999	1999
126	Fogarty Screens (Phase II)	2006	2006
127	Lewis Screens (Phase II)	2001	2001
128	LaFortune/Powell Screens (Phase II)	2001	2001
129	Selah-Moxee Screens (Phase II)	2002	2002
130	Packwood Screen (Phase II)	2004	2004
	DUCK VALLEY INDIAN PROJECT		
131	Wild Horse Dam	1969	1969

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Reserved Works (O&M)
Upper Colorado Region

	Project and feature	Initially Completed	Transferred to O&M	Transfer to user schld.
	COLLBRAN PROJECT			
	Grand Mesa Unit			
1	Grand Mesa System	1893,1939,62	1967	1/
2	Molina Power Facilities	1962	1967	
3	Bonham-Cottonwood Collection System			
	COLORADO RIVER BASIN SALINITY CONTROL PROJECT			
4	Paradox Valley Facilities	1989	1996	No
	COLORADO RIVER STORAGE PROJECT			
5,6	Blue Mesa Dam and Powerplant	1966	1968	No
7,8	Crystal Dam and Powerplant	1978	1979	No
9,10	Flaming Gorge Dam, Spillway/Sidehill Bridges, and Powerplant	1963,64	1964	No
11,12	Glen Canyon Dam and Powerplant	1966	1967	No
13,14	Morrow Point Dam and Powerplant	1971	1971	No
15	Navajo Dam	1963	1963	No
	ENDANGERED SPECIES RECOVERY IMPLEMENTATION PROGRAM			
17	Redlands Fish Passageway Facilities	1999	1999	2/
	MIDDLE RIO GRANDE PROJECT			
18	Rio Grande Channelization	1962	1962	No
	PECOS RIVER BASIN WATER SALVAGE PROJECT			
19	Pecos River Water Salvage		1967	No
	PROVO RIVER PROJECT			
20	Deer Creek Powerplant			3/

1/ Includes Cottonwood Lake #1, 2, 3, 4, 5; Forty Acre Lake; Forty Acre Lake Dike; Kitson; Lambert; Little Meadows; Neversweat; Silver Lake. These facilities were never owned by Reclamation however the water rights are held in the name of the United States. In 2000, dams no longer examined by Reclamation but examined under the State of Colorado's program for dam safety.

2/ Reclamation currently holds title to these facilities and is in the process of transferring it to the Redlands Water and Power Company as authorized under the Recovery Implementation Program. Redlands Water & Power Co. owns and operates Redlands Diversion Dam and Canal. Reclamation pays for extraordinary maintenance; Fish and Wildlife performs day-to-day operations.

3/ O&M contracted with Provo River Water Users Association.

	Project and feature	Initially completed	Transferred to O&M	Transfer to user scheduled
	RIO GRANDE PROJECT			
22	Caballo Dam and Arroyo Diversion	1938,39	1939	No
23,24	Elephant Butte Dam, Dike, and Pwrplt	1916	1916	No
	SAN JUAN-CHAMA PROJECT			
25	Diversion, Collection, and Channelization	1971	1975	No
26	Heron Dam and Dike	1971	1975	No
	SAN LUIS VALLEY PROJECT			
27	Closed Basin System			No 1/
	SEEDSKADEE PROJECT			
28,29	Fontenelle Dam and Powerplant	1964	1968	No

1/ Rio Grande Conservancy District performs some of the O&M under contract with Reclamation. No plans to completely transfer O&M to district.

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Transferred Works (O&M)

Upper Colorado Region

	Project and feature	Initially completed	Transferred to users
	BALMORHEA PROJECT		
1	Reeves County Water Improvement District No. 1	1947	1951
	BOSTWICK PARK PROJECT		
2	Silver Jack Dam	1971	1976
3	Bostwick Park Water Conservancy District System	1974	1976
	BRANTLEY PROJECT		
4	Brantley Dam	1992	1994
	CARLSBAD PROJECT		
5	Avalon Dam	1907	1949
6	Sumner Dam	1937,56	1990
	CENTRAL UTAH PROJECT		
	Initial Division		
	Bonneville Unit		
7	Currant Creek Dam	1981	1990
8	Soldier Creek Dam	1985	1998
9	Starvation Dam and Knight Diversion Dam	1970	1982
10	Strawberry Collection System	1980,84	1982,84
11	Syar Tunnel	1998	1998
12	Alpine Aqueduct System	1980	1982
13	Jordan Aqueduct System	1982,84	1982,84
14	Jordanelle Dam	1998	1998
15	Upper Stillwater Dam	1994	1994
16	Trial Lake Dam	1914,90	1990
17	Washington Lake Dam	1910,94	1994
18	Lost Lake Dam	1931,95	1995
	Jensen Unit		
19	Red Fleet Dam	1981	1985
20	Sixth Water Aqueduct	1998	1998
21	Tyzack Pumping Plant and Aqueduct	1987	1988
	Vernal Unit		
22	Steinaker Dam	1961	1967
23	Uintah Water Conservancy District System	1961	1967

	Project and feature	Initially completed	Transferred to users
	COLLBRAN PROJECT		
24	Vega Dam	1959	1963 1/
25	Collbran Conservancy District System	1962	1963
	DALLAS CREEK PROJECT		
26	Ridgway Dam	1986	1991
	DOLORES PROJECT		
27	McPhee Dam and Great Cut Dike	1993	1994
28	Dolores Tunnel, Canal, and Laterals	1985,94	1988,94
29	Dolores Pumping Plants	1993	1993
30	Towaoc Powerplant	1986	1986
	EDEN PROJECT		
31	Big Sandy Dam and Dike	1952	1970,86
32	Eden Dam	1910,59	1970
33	Eden Valley Irrigation and Drainage District System	1958	1970
	EMERY COUNTY PROJECT		
34	Huntington North Dam	1966	1970
35	Joes Valley Dam	1966	1970
36	Swasey Diversion Dam	1966	1970
37	Emery Water Conservancy District System	1966	1970
	FLORIDA PROJECT		
38	Lemon Dam	1964	1968
39	Florida Water Conservancy District System	1964	1967
	FORT SUMNER PROJECT		
40	Fort Sumner Irrigation District System	1951	1951
	FRUITGROWERS DAM PROJECT		
41	Fruitgrowers Dam	1939	1940
42	Orchard City Irrigation District System	1967	1967
	GRAND VALLEY PROJECT		
	Garfield Gravity Division		
43	Grand Valley Diversion Dam	1916	1949
44	Grand Valley Water Users Association System	1915,85	1949,87
	Orchard Mesa Division		
45	Grand Valley Powerplant	1933	1933
46	Orchard Mesa Irrigation District System	1915,27	1925,49
	HAMMOND PROJECT		
47	Hammond Conservancy District System	1962	1974

1/ BOR contracts with Collbran Conservancy District for O&M.

	Project and feature	Initially completed	Transferred to users
	HYRUM PROJECT		
48	Hyrum Dam	1935	1936
49	South Cache Water Users System	1935	1936
	LYMAN PROJECT		
50	Meeks Cabin Dam	1971	1982,96
51	Stateline Dam	1981	1982
	MANCOS PROJECT		
52	Jackson Gulch Dam	1949	1962
53	Mancos Water Conservancy District System	1950	1962
	MIDDLE RIO GRANDE PROJECT		
54	El Vado Dam	1935,1955	1958 1/
55	Middle Rio Grande Conservancy District System	1962	1975
	MOON LAKE PROJECT		
56	Moon Lake Dam	1938	1938
57	Moon Lake Water Users System	1938	1938
	NEWTON PROJECT		
58	Newton Dam	1945	1948
59	Newton Water Users System	1947	1938
	OGDEN RIVER PROJECT		
60	Pineview Dam	1936-57	1937,57
61	Pineview Water Systems	1937	1937
	PAONIA PROJECT		
62	Paonia Dam	1962	1962
63	Fire Mountain Diversion Dam	1950	1950
64	North Fork Water Conservation District System	1950	1950
	PINE RIVER PROJECT		
65	Vallecito Dam	1941	1971

1/ Dam owned by Middle Rio Grande Conservancy District. District pays Reclamation to perform O&M. Reclamation owns outlet works.

	Project and feature	Initially completed	Transferred to users
	PRESTON BENCH PROJECT		
66	Preston Riverdale and Mink Creek Canal System	1949	1951
	PROVO RIVER PROJECT		
67	Metropolitan Water District System	1949	1951
68	Deer Creek Dam	1941-58	1958,59
69	Provo River System - East Side	1950	1952
70	Provo River System - West Side	1930,50	1939,52
	RIO GRANDE PROJECT		
71	Leasburg Diversion Dam	1954	1954
72	Lucero Detention Dike		
73	Mesilla Diversion Dam	1954	1954
74	Percha Diversion Dam	1954	1954
	SAN JUAN-CHAMA PROJECT		
75	Nambe Falls Dam	1976	1977,90
	SAN LUIS VALLEY PROJECT		
76	Platoro Dam	1951	1991
	SANPETE PROJECT		
	Ephraim Division		
77	Ephriam Irrigation Company System	1937	1937
	Spring City Division		
78	Horseshoe Irrigation Company System	1939	1941
	SCOFIELD PROJECT		
79	Scofield Dam	1946	1949
	SILT PROJECT		
80	Rifle Gap Dam	1967	1968
81	Silt Water Conservancy District System	1967	1968
	SMITH FORK PROJECT		
82	Crawford Dam	1962	1964
83	Smith Fork Diversion Dam	1962	1964
84	Crawford Water Conservancy District System	1962	1964

	Project and feature	Initially completed	Transferred to users
	STRAWBERRY VALLEY PROJECT		
	Highline Division		
85	Highline Canal Company System	1916	1916
	Spanish Fork Division		
86	Strawberry Water Users System	1908	1913
	Springville-Mapleton Division		
87	Springville-Mapleton System	1918	1918
	TUCUMCARI PROJECT		
88	Arch Hurley Conservancy District System	1949	1954
	UNCOMPAHGRE PROJECT		
89	Gunnison Diversion Dam	1912	1932
90	Taylor Park Dam	1937	1937
91	Uncompahgre Valley Water Users System	1909	1932
	WEBER BASIN PROJECT		
92	Causey Dam	1966	1969
93	East Canyon Dam	1966	1967
94	Lost Creek Dam	1966	1968
95	Slaterville Diversion Dam	1958	1969
96	Stoddard Diversion Dam	1956	1968
97	Wanship Dam	1957,58	1968
98	Arthur V. Watkins Dam	1964	1969
99	Weber Basin Water Conservancy District System	1961,69	1961,69
	WEBER RIVER PROJECT		
100	Echo Dam	1931	1932

APPENDIX B

Questionnaire
Managing For Excellence
Team 26/27 – Identify Opportunities to Transfer O&M

This short questionnaire is to be completed by Area Managers following discussion and agreement with their Regional Director. Please complete and return it to the Team 26/27 member who sent it to you by **September 15, 2006**.

1. Are you aware of any facilities within your Reclamation Projects that are under your area office jurisdiction that you feel would be good candidates for O&M Transfer and why?

2. What are the main obstacles to overcome in order to successfully transfer O&M for these facilities? What are the keys to success?

3. Are you aware of Water Districts/Water Users that have expressed an interest in transferring the O&M to them? Who are they, and what facilities are they interested in? Why hasn't O&M transfer of these facilities been pursued or implemented to date?

4. Are there multi-purpose projects within your area for which O&M has been transferred? What are the projects and how successful has the transfer been?

5. Are you aware of any facilities within your Reclamation Projects where Reclamation is performing the OM&R, where outsourcing (to a district or other entity including a commercial service provider) might make sense or should be considered and evaluated? If yes, please identify them?

Region	Area Office	Question 1 Candidate for O&M Transfer? Y/N	#	Question 2 Obstacles to Overcome? List	Question 3 WU Expressed Interest? Y/N	#	Question 4 Multipurpose transfers? Successful? Y/N	List	Question 5 Reclamation Contracting OM&R? Y/N	Opportunities to Contract OM&R Y/N
Pacific Northwest	**Lower Columbia**	Yes	3	Water Exchanges under Basin Project Act	No		Yes	Scoggins and McKay	Yes	
	Grand Coulee								Yes	
	Snake River	Yes Headworks of Minidoka Burley Idaho Canals	2	The districts would like to wait until the Minidoka Spillway Rehabilitation Project is complete, because the headworks may be replaced during this process.	No		Yes	Vale, Owyhee, Baker, Burnt River, Mann-Creek, Fremont-Madison Division of the Minidoka Project	No	
	Upper Columbia	No		N/A	No		No		No	
Mid Pacific	**Northern California**	Yes Red Bluff Diversion Dam Shasta Pumping Plant	2	Uncertainty about any significant cost savings following a transfer of Red Bluff Diversion Dam. Interested partners would have to demonstrate or develop necessary technical skills. No benefit in transferring Shasta Pumping Plant.	Yes	1	No		Yes	No
	S-Central California	No	0	Securing someone whom the stakeholders view as neutral and would be willing to take on the flood-control and water supply liability, as well as O&M costs.	No		Yes	San Luis Joint use Facilities (San Luis Unit) and Santa Maria River Project	Yes	No
	Central California	No		Various facilities at Folsom Dam and Reservoir are designated as part of the National Critical Infrastructure. No operators have shown interest	No		Yes	Solano Project	No	No
	Klamath Basin	Yes Link River Dam Straits Drain Gerber Dam Clear Lake Dam Ady headworks to Klamath Drainage District	4	Environmental Compliance Costs, funding of replacements and extraordinary maintenance.	Yes	2	N/A		Yes	No
	Lahontan Basin	No		Reclamation, LBAO, has specific federal responsibilities for an interstate allocation, Tribal trust responsibilities, Endangered Species Act responsibilities, and court decrees to abide by.	Yes	1	Yes	Newlands Project	No	No

Region	Area Office	Question 1 Candidate for O&M Transfer? Y/N	#	Question 2 Obstacles to Overcome? List	Question 3 WU Expressed Interest? Y/N	#	Question 4 Multipurpose transfers? Successful? Y/N	List	Question 5 Reclamation Contracting OM&R? Y/N	Opportunities to Contract OM&R Y/N
Great Plains	Oklahoma-Texas	No		Not Applicable (N/A). All Reclamation facilities under the jurisdiction of the Oklahoma-Texas Area Office have been transferred	N/A		Yes	Canadian River, Wichita, Washita Basin, Oklahoma, Mountain Park, W C Austin, Norman, Arbuckle, McGee Creek, San Angelo, and Nueces River.	N/A	N/A
	Nebraska-Kansas	No		The states and municipalities lack the capability and or interest in being responsible for O&M. The irrigation districts are not interested, and lack the capability or financial resources for this responsibility.	No		No		Yes	No
	Montana	Yes Nelson Dikes Fresno Dam	2	Fresno Dam: reservoir operations for flood control and accounting for Ft. Belknap Tribes' storage. Nelson Dikes: allocation of O&M costs and reservoir operations to provide water to a federal wildlife refuge and to protect a threatened shorebird under the Endangered Species Act	Yes	2	Yes	Yes. Clark Canyon Dam, East Bench Unit and Helena Valley Pumping Plant and Helena Valley Dam, Helena Valley Unit.	No	No
	Eastern Colorado	No		C-BT: Study in 2007 concluded that not appropriate to transfer O&M at this time Fry-Ark: No interest by project beneficiaries at this time	Yes	2	Yes	Willow Creek Dam, Willow Creek Pumping Plant and Pump Canal, Grandby Dam, Shadow Mountain Dam, Farr (Grandby Pumping Plant), Carter Dam, Horsetooth Dam, Charles Hansen (Horsetooth) Feeder Canal, and St Vrain Supply Canal	No	No
	Wyoming	No			No		No		No	No
	Dakotas	Yes Pactola Dam Deerfield Dam	2		Yes		Yes	Angostura Dam and Belle Fourche Dam	Yes	No

Region	Area Office	Question 1 Candidate for O&M Transfer? Y/N		Question 2 Obstacles to Overcome? List	Question 3 WU Expressed Interest? Y/N		Question 4 Multipurpose transfers? Successful? Y/N	List	Question 5 Reclamation Contracting OM&R? Y/N	Opportunities to Contract OM&R Y/N
Lower Colorado	**Phoenix**	No		Developing a common agreement on what is an acceptable, sustainable level of O&M and keeping the relationship solid enough to talk out the issues which will arise over time. Also, having an entity with the political and financial resources to do what is necessary without having to fall back on Reclamation.	No		Yes	CAP and SRP	No	
	Lower Colorado Dams	No		A very clear definition of roles and responsibilities would be needed	No		No		No	
	Yuma	Yes Drop 2	1	Native American tribes contend that the Federal Government should have considered them as recipients of the transfer.	No		Yes			
	Boulder Canyon Operations	No		The water users want OM&R transferred to them	No		Yes	CAP	Yes	
Upper Colorado	**Provo**	Yes Deer Creek Power Plant	1	Power marketing and power revenue issues and the economics to the water users.	Yes	1	Yes	Central Utah, Emery, Ogden River, Provo River, Schofield, Strawberry Valley, Weber Basin, and Weber River	Yes	No
	Western Colorado	Yes Animus La-Plata	1	Getting eight water user entities to agree on concepts/methods for transfer, and timing of the transfer.	No		Yes	Dolores, Pine River, Mancos, Florida, Dallas Creek, Paonia and the Grand Valley Unit of the CRBSCP	Yes	
	Albuquerque	No		N/A	No		No		No	

APPENDIX C

Considerations for Transfer of O&M or Contracting for O&M Services

Considerations for transfer of O&M or contracting for O&M services were developed from lessons learned through years of outsourcing. Many of the lessons learned from O&M transfers or contracting out for O&M services are unique to each means; however, there are some lessons common to both. Common to both methods are; ensuring adequate level of oversight by Reclamation, maintaining technical expertise within Reclamation, and employee relations prior to and during transfer or contracting process.

Level of Oversight

Prior to transferring O&M or contracting out O&M services the appropriate level of oversight and/or quality assurance (QA) needs to be determined. Adequate staff will need to be employed to oversee the transfer agreement or perform QA. This is essential to ensuring that operation and maintenance of the facilities continue to be performed in a satisfactory manner and according to contract.

Reclamation's Review of Operation and Maintenance (RO&M) Program has provided an excellent framework for the oversight of the transferred facilities. More oversight, and therefore more staff time, will be required to oversee contracts for O&M services.

During the first years of an O&M transfer, RO&M inspections alone will probably not be sufficient, or at least not sufficient if conducted on the typical three year cycle. An initial transition period will be needed during which more frequent contact and inspections are needed. As the transferee gains experience operating and maintaining the facility, less oversight will be required. However, more oversight will continue to be required when appropriated funds are used for O&M. The extent of oversight of the use of appropriated funds should be determined by Reclamation in advance of the transfer. This additional oversight should include review and approval of work plans and budget.

After the level of oversight is determine the QA plan should be provided to the transferee or contractor. If the transferee is required to pay all or a portion of the oversight costs then the costs of the oversight/QA plan should also be provided.

Maintaining Technical Expertise

It is important that Reclamation maintain the in-house technical expertise necessary to oversee the O&M of the facilities that are both transferred and contracted out. This can be difficult if all or most of the O&M work is transferred or contracted out. This is critical to ensure that the contractor is performing the work in a satisfactory manner and protecting the Federal investment, and in the case of Reclamation funded work, that O&M costs are reasonable.

Employee Relations

Employee relations prior to and during outsourcing should be considered and issues that arise should be promptly addressed by management. Employees should be kept informed of the process and how the decision to outsource will be made. The decision making process should not be overly long as this causes undue worry by the employees. A lengthy decision making process can lead to problems with employee retention prior to outsourcing. If outsourcing does not take place then it can lead to difficultly attracting new employees.

Negotiate the right of first refusal for current employees to fill the new positions offered by the transferee if the decision is made to outsource the O&M of facilities currently being operated and maintained by Reclamation employees. Current Reclamation employees will be an asset to the transferee or contractor since they are experienced in the operation and maintenance of the facilities and have the historical knowledge for a project that has already been transferred to O&M status.

The remaining lessons learned are specific to the method of outsourcing, consequently O&M transfer and contracting out O&M services are discussed separately in the following sections.

O&M Transfer

Contracting for O&M Services as an Interim Step

An intermediate step, such as contracting out the work to a Reclamation partner may be advisable to allow plenty of time to resolve all issues. This could also allow time for the partner to develop the knowledge, skills and abilities necessary to successfully O&M the facilities following transfer and to allow adequate time to develop the transfer agreement.

Reducing Liability Risk

Transfer agreements contain language limiting our liability. However, financial liability will in many cases be shared with Reclamation for multi-purpose facilities with non-reimbursable or cost sharing components. Reclamation could be billed for its share of the cost of settling a claim or paying a judgment. Reclamation oversight during O&M reviews should consider liability risks and work with the transferee to minimize those risks.

Environmental Commitments

Clearly define the responsibility of the transferee to follow environmental commitments related to the transferred facilities. More detail than just the basic requirements in the transfer agreement should be provided. Transferees need to know what their responsibilities are when working on Reclamation facilities on Federal land and the process of involving Reclamation in O&M activities that could impact the environment. NEPA, ESA, biological opinions, cultural resources, integrated pest management, etc, must be discussed so that the transferee understands their role in these issues. Inviting

the participation of the transferee in developing O&M standards consistent with Reclamation's environmental commitments is encouraged.

Documenting Condition of Facilities

The condition of facilities and outstanding issues at the time of transfer should be well documented. This is especially important with the transfer of older facilities. Inspections, reports, and photographs (still and video) are all valuable means to document the condition of the facilities.

Contracting for O&M Services

Most of the lessons learned in this section apply to contracts with Reclamation partners for O&M services rather than commercial contractors. However, some of the lessons learned are applicable to both types of contracts.

Contracting Method

When a facility cannot be transferred to an interested partner because there is no existing contract allowing for the transfer, or the facility is multipurpose or funded entirely with a non-reimbursable appropriation, sole source contracting with our partners has been used. Sole source contracting can also be used as a means to allow time to develop the capability of the interested partner until a transfer agreement can be negotiated, or to simply contract out services to the partner because they have a vested interest. In either case, sole source contracting must be justified appropriately according to the Federal Acquisition Regulations.

Chose the proper contracting method carefully. Service contracts may be a fixed price contract, a time and materials, contract, or both, depending on the type of work begin accomplished. Fixed price contracts are best used for work that is repetitive in nature where the conditions are known. Time and materials contracts are more appropriate for repairs and emergency work. Be aware that time and materials contracts will require more oversight, so there are trade-offs for using each method.

Contracting for the services of our partners often presents a problem initially. Generally our partners are not set up to bid on contracts as are commercial contractors and are not familiar with the requirements or process. Fixed price contracts can be more of a challenge than time and materials contracts since our partners may be quasi-governmental agencies. Fixed price contracts require the contractor to absorb the cost of work that extends beyond the time estimated for completion. However, this goes both ways. Work for which the time was over estimated will result in the contractor receiving excess funds. Because of the uncertainty the contractor may submit a high bid, emphasizing the need for a good cost estimate, so that an equitable agreement can be reached.

Economically Advantageous

Although economics is not the only criteria for determining whether or not contracting out O&M is desirable, it is important to determine whether or not there is a significant cost savings to the public. The cost estimates should include contract oversight and QA. The estimate will also be used to evaluate the bids and as a basis for negotiating with sole-source partners and small business contractors. This of course calls for a good cost estimate prepared by knowledgeable O&M staff.

Expertise of Contractor

The ability for a partner to perform O&M services will generally be known. However, this is not the case for commercial contractors. The expertise of the contractor is critical for many specialized jobs and sufficient contract language should be used to ensure that qualified contractors are retained. Checking past references of commercial contractors is also important to verify the contractor's qualifications and performance on recent jobs.

Nature or Complexity of Work

Certain work, because of its nature or complexity does not lend itself to contracting out. Work that involves tribal trust responsibilities, endangered species issues, interstate matters, and diverse or competing interests are not good candidates for contracting out. This type of work is best done by Reclamation where close association with the work is needed to ensure Reclamation is meeting our commitments, abiding by laws, and managing sensitive issues appropriately.

Responsiveness to Time Critical Issues

Response times for completing repairs and performing operations need to be considered when determining whether or not the interested partner is capable of managing the O&M. The contractor must have the necessary staff and equipment available to act quickly in an emergency or be able to quickly procure the necessary services of an outside contractor to react to an emergency.

Warranties

Contracts with commercial contractors usually include a warranty clause requiring the contractor to correct an identified deficiency within a certain period of time after the work has been completed. A warranty clause should also be included in maintenance service contract with our partners. Generally our partners are quasi-governmental agencies and may not be set up to manage this way. This should not discourage us from requiring warranty clauses. The requirement for contractors to guarantee their work encourages good workmanship and quality control and requires them to correct deficiencies at their own cost negating the need for the government to pay twice for the same work.

Minimizing Change Orders

It goes without saying that a well thought out work plan and good statement of work will result in fewer change orders. Change orders almost always increase the cost of a contract over the amount it would have been if the change had been incorporated into the contract before award. This is probably more true for contracts with commercial vendors, but bears consideration for contracts with our partners.