



**U.S. DEPARTMENT OF THE INTERIOR
OFFICE OF INSPECTOR GENERAL**

PROGRAM ASSESSMENT RATING TOOL

PROGRESS EVALUATION OF THE BUREAU OF INDIAN AFFAIRS IRRIGATION PROGRAM





United States Department of the Interior

Office of Inspector General

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November 19, 2007

Memorandum

To: Jerold L. Gidner
Director, Bureau of Indian Affairs

From: Donald W. Cairns *Donald W Cairns*
Director, Program Analysis and Technical Support

Subject: Program Assessment Rating Tool (PART) — Progress Evaluation of the Bureau of Indian Affairs (BIA) Irrigation Program (Report No. Y-RR-BIA-0003-2007)

The Office of Inspector General recently had the opportunity to complete an independent assessment of BIA's Irrigation Program. We spent time with BIA employees in Washington, DC, and visited several field sites to learn about Program operations. We thank your staff for their time and valuable input.

Our team evaluated the progress your staff has made in addressing recommendations from the Office of Management and Budget (OMB). We provide our observations in the attached report. The Program is addressing many challenges, and we offer 16 suggestions that we believe will help you prepare for OMB's next review. We encourage you to discuss these suggestions with your Deputy Director — Trust Services and implement those that you agree will improve Program performance and the BIA's chances of a successful PART review in the future.

If you have any comments or questions regarding this report, please call me at 703-487-8011.

cc: Assistant Secretary — Policy, Management and Budget

PART — PROGRESS EVALUATION OF THE BUREAU OF INDIAN AFFAIRS IRRIGATION PROGRAM

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ON THE COVER

Working to Improve Conditions and Technology at the Uintah Indian Irrigation Program.
 Irrigation Structure from left to right: 1) missing gate, 2) manual gate, and 3) solar-powered radio-controlled gate. A
 U.S. Bureau of Reclamation grant partially funded this recent update. *OIG Staff Photo*

ACRONYMS USED	
ACA	Annual Condition Assessment
BIA	Bureau of Indian Affairs
BOR	U.S. Bureau of Reclamation
CCA	Comprehensive Condition Assessment
DASM	Office of the Deputy Assistant Secretary for Management
DOI	Department of the Interior
FPP	Financial Program Planning System
FY	Fiscal Year
GAO	Government Accountability Office
GIS	Geographic Information System
IID	Imperial Irrigation District
IPSOD	Division of Irrigation, Power, and Safety of Dams
NIIMS	National Irrigation Information Management System
OIG	Office of Inspector General
OMB	Office of Management and Budget
O&M	Operation and Maintenance
PART	Program Assessment Rating Tool

INTRODUCTION

WHY WE DID THIS PROGRESS EVALUATION

The Deputy Secretary of the Department of the Interior (DOI) asked the Office of Inspector General (OIG) to evaluate the progress made in programs designated **Results Not Demonstrated** by the Office of Management and Budget (OMB). OMB uses the Program Assessment Rating Tool (PART) to make these designations.

We selected the Bureau of Indian Affairs (BIA) Irrigation Program (referred to as the Program). The BIA Division of Irrigation, Power, and Safety of Dams (IPSOD) administers the Program, together with staff and partners at BIA regional offices and field agencies. OMB reviewed the Program in 2005.

OBJECTIVES

Based on its review, OMB made recommendations that relate to audit follow-up, management of facilities information, and performance measurement. Our objectives were to determine what progress BIA and IPSOD have made toward implementing the OMB recommendations and to provide observations and suggestions that DOI and Program managers can use in preparing for upcoming PART reviews.

SCOPE AND METHODOLOGY

To meet the objectives, we interviewed Bureau and Department officials; reviewed and analyzed Program documentation; and completed a limited review of related literature in the fields of agricultural irrigation and facilities management. We also visited several Indian irrigation sites, as noted at Appendix B. We conducted this progress evaluation in accordance with the “Quality Standards for Inspections” established by the President’s Council on Integrity and Efficiency. We based our suggestions on OMB 2007 PART guidance.

HOW WE STRUCTURED THIS REPORT

Following a brief Program overview, we present a number of suggestions related to 1) facilities information; 2) performance measures; 3) assessment rates and budgets; 4) billing and collection; and 5) field operations support. Appendix C shows how these topics and suggestions relate to the OMB PART recommendations.

WHAT IS THE PART?

Federal agencies use the PART, a standard questionnaire, to submit information on federal programs to OMB.

OMB uses the information to determine program effectiveness, to recommend improvements for rated programs, and to follow up on those improvements.

The ExpectMore.gov Web site publishes PART results.

See Appendix A for more information on the history and use of the PART.

BIA IRRIGATION PROGRAM OVERVIEW

For more than a century, DOI has helped irrigate Indian lands in support of agricultural and economic development. Today, BIA is responsible for operating, maintaining, and rehabilitating 15 irrigation projects in four regions, with oversight from IPSOD as the central program office. Program staff also provide technical assistance to Indian tribes that own and operate scores of irrigation systems.

Collectively, BIA-managed projects deliver water to around 710,000 acres by maintaining and operating tens of thousands of structures and more than 5,000 miles of canals.

The projects vary widely in terms of duration of the irrigation season and crops supported.

As can be seen in Table 1, BIA projects generate about \$25 million in revenues each year that are classified as miscellaneous permanent appropriations in the following year. Direct appropriations include about \$11 million (Trust — Natural Resources Management), most of which is directed to specific projects by court decree or by various legislative stipulations. From time to time, the Congress also appropriates funding for the rehabilitation of irrigation projects (Resource Management Construction). In FY2006, such funding was available and earmarked for the five projects in the BIA Rocky Mountain Region, which encompasses Montana and Wyoming. By virtue of the omnibus continuing resolution, rehabilitation funding was again available in FY2007. Thus, annual funding for the Program runs about \$40 million.

The BIA irrigation projects are vital components of the local agricultural economy of the reservations on which they are located.

— from BIA Notice of Proposed Rulemaking preamble, 71FR40450, July 2006

Table 1. Approximate Funding Level (\$ millions)

Budget Activity and Sub-Activity or Program Element	FY2005	FY2006	FY2007	FY2008 Request
Miscellaneous Permanent Appropriations O&M Indian Irrigation Systems	22.6	27.4	25.7	25.7
Trust — Natural Resources Management Irrigation O&M	9.1	13.0	12.5	11.1
Resource Management Construction Indian Irrigation Rehabilitation	0.0	6.4	7.0	0.0*
Combined:	31.7	46.8	45.2	36.8

*The House Appropriations Committee has proposed \$2 million.

OBSERVATIONS AND SUGGESTIONS

Based on its 2005 PART assessment, OMB made a number of recommendations to improve Program operations. The OMB report called on BIA to close outstanding audit deficiencies, compile an inventory of facilities that includes their condition, and measure Program performance. Audit follow-up actions relating to the Program cover a range of goals, such as properly accounting for deferred maintenance, improving communication with water users, and improving support for field personnel. We have observed some progress toward implementing each of these goals, but much work remains. We summarize below key actions taken to date and discuss suggestions to further strengthen Program management. See Appendix D for a complete list of our suggestions.

FACILITIES INFORMATION

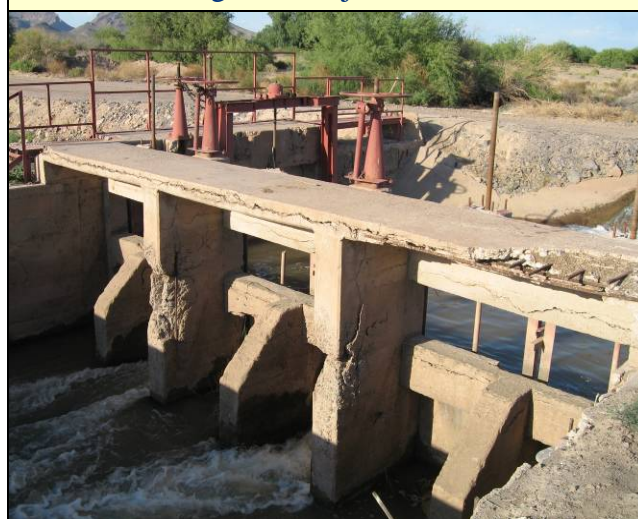
In this section, we discuss 1) operation and maintenance (O&M); 2) rights-of-way; 3) maintenance management; and 4) deferred maintenance and provide suggestions to improve facilities information. By acting on our suggestions, Program officials will be able to establish a more reliable base of information on irrigation facilities and associated deferred maintenance cost estimates.

Operation and Maintenance

BIA has data on 15 irrigation assets. These assets each represent an irrigation project. A project consists of (on average) 4,000 structures and hundreds of miles of canals and associated rights-of-way that must be maintained. Because project officials manage these multitudes of facilities and corresponding components, they say asset-level information is not useful in determining future repair and replacement schedules and costs.

BIA hired a contractor to develop a geographic information system (GIS) during the period FY1999-2003. The GIS was to be used to inventory irrigation structures and canals and to provide a visual assessment of the condition of each facility. The GIS database now functions as the IPSOD preliminary inventory. However, field officials told us they have no means of updating the database. As a result, it is now 4 to 8 years out-of-date. In addition, many field offices lack computers or connectivity robust enough to work with the layers of intensive GIS data and cannot use the system to plan O&M activities.

Figure 1. An Irrigation Structure at the San Carlos Irrigation Project — Indian Works



OIG Staff Photo

DOI guidance calls for completion of an annual condition assessment (ACA) and a comprehensive condition assessment (CCA) at least every 5 years of each real property asset so that maintenance needs and accomplishments can be documented. As noted above, field officials interviewed told us they have no means to update ACA data.

The Program's performance measures call for three CCAs to be completed per year, beginning in FY2006. Program officials stated that completion of the condition assessments was dependent upon funding, yet no project has increased assessment rates by a sufficient amount. Further, recent budget justifications do not include any increase in Program funding to address this requirement. At the time of our inquiry, only two assessments were complete, and no BIA contracts were in effect to meet the FY2006 or FY2007 CCA goals.

In the absence of BIA funding, the Tribe at the Flathead Indian Irrigation Project funded one CCA, and the U.S. Bureau of Reclamation (BOR) funded a CCA for the Crow Indian Irrigation Project. We understand that these agencies paid between \$300,000 and \$500,000 — or more than \$4 per acre — to complete these detailed assessments, which included itemized analyses of facilities repair and replacement needs.

In contrast, BOR conducts O&M reviews on each of its irrigation projects approximately once every 5 years. For example, BOR regional and area offices staff, together with the manager of the local water district, recently completed an O&M review for the BOR Fort Yuma Project for approximately \$20,000 in staff time.

Documentation is not as detailed as the BIA CCAs, nor does the BOR format include independent cost estimates. However, BOR does provide a categorized list of recommended rehabilitation and betterment¹ activities prepared by a knowledgeable team of existing professional staff.

The three categories into which BOR places recommendations are:

Category 1. Recommendations involving the correction of severe deficiencies when immediate and responsive action is required to ensure structural safety and operational integrity of a facility.

Category 2. Recommendations covering a wide range of important matters when action is needed to prevent or reduce further damage or preclude possible operational failure of a facility.

Category 3. Recommendations covering less important matters but believed to be sound and beneficial suggestions to improve or enhance the O&M of the project or facility.

¹For our purposes, "betterment" activities refer to expansion, modernization, and more — anything done to improve a facility beyond its original state.

This approach seems to provide a reasonable basis for project planning — without the need for a major funding initiative.

One BIA project manager with whom we spoke indicated that he and his maintenance foreman visually inspected the entire project at the end of each irrigation season to prioritize work for the maintenance season. He no longer completes this inspection because so much time is consumed satisfying administrative requirements. Automated personnel and timekeeping systems on inadequate computing networks, unclear planning and performance reporting requirements, and a growing list of audit follow-up activities all divert the attention of senior staff from the core functions of operating and maintaining irrigation facilities.

We believe that BIA should not forgo timely (i.e., annual) assessments of project-level priorities in pursuit of CCAs. Rather, it should weigh the cost, benefits, and timeliness of the current strategy of procuring CCAs by outside engineers against alternative approaches. BIA should consider completing O&M reviews similar to those conducted by BOR.

See Appendix E for PART questions in which the OMB examiner specifically cited the need for an inventory of facilities conditions. BIA has the preliminary inventory in its GIS database, but further effort to ensure timely update would be required before we would consider this inventory reliable.

SUGGESTION 1

BIA should reconsider its condition assessment strategy in order to provide a timely and cost-effective means for project managers to assess and communicate current conditions and priorities.

Rights-of-Way

The ability to operate and maintain the irrigation infrastructure is, of course, dependent upon safe access to the facilities. The need for maintenance pertains not only to structures and canals, but to adequate rights-of-way and access roads. Physical obstruction and inadequate legal protection of rights-of-way can impair irrigation O&M activities.

Such impairment is evident in a comparison between the settings depicted in Figure 2, where clear access to the canal is maintained, and Figure 3, where extensive canal maintenance work would require either removal of the residents' fencing and landscape improvements or the use of costly specialized equipment to ensure worker safety. Without legal enforcement, developers have encroached on the projects' rights-of-way. Project managers should note in their O&M reviews any areas where encroachment affects their ability to access irrigation facilities, and BIA should take appropriate action when it identifies such situations.

SUGGESTION 2

BIA should work closely with the Office of the Solicitor to assess BIA's legal standing in claiming rights-of-way for irrigation and enforce such rights to ensure worker safety and operational efficiency.

Figure 2. A Clear Right-of-Way



BIA maintains a clear access road on each side of this irrigation canal.

*OIG Staff Photo
(Colorado River Indian Irrigation Project)*

Figure 3. An Obstructed Right-of-Way



BIA maintains an access road on one side of this canal, but encroachment by residential development precludes safe access to the high-side embankment.

*OIG Staff Photo
(Fort Hall Indian Irrigation Project)*

Maintenance Management

Nearly 6 years after the Assistant Secretary for Indian Affairs selected MAXIMO™² as the standard maintenance management tool, irrigation officials report many problems implementing the system. In addition to basic work-order tracking, some MAXIMO capabilities include scheduling jobs and resources; inventorying key equipment; estimating job costs; budgeting for maintenance; locating structures and other irrigation system components; and identifying the latest assessed condition of each component.

The Colorado River Indian Irrigation Project uses MAXIMO for work-orders, but officials say the system seems designed for building management — not for linear systems such as canals and rights-of-way. Adapting to this design requires some changes that are not useful for irrigation projects, which caused some officials to say they have difficulty identifying specific facilities in the new system. Officials also say that MAXIMO does not alert them when inventories are low; rather, it alerts only when stocks are completely depleted. Consequently, at the suggestion of the support contractor, officials use “dummy” inventory figures to get the system to work, while manually tracking on-hand stocks. Further, Project officials say the system is not useful for budgeting because they are unable to incorporate labor into job cost estimates. Support

²MAXIMO is a trademark of International Business Machines Corporation.

contractors are said to be reportedly working on improvements, but irrigation officials are frustrated by a lack of progress.

Managers at the Colorado River Project have assigned an employee to work with MAXIMO full-time. Also, other project managers anticipate a need to hire additional staff, which would further stretch already insufficient operating budgets.

In contrast, the Division Chief, IPSOD, envisions maintenance staff entering their own work tickets and updating the condition of structures or segments of canal as they complete maintenance. He stresses that keeping MAXIMO up-to-date will ease reporting burdens and that using the system routinely can improve project management.

SUGGESTION 3

Program and information technology officials should identify, analyze, and address the hurdles to implementing the standardized maintenance management system. Causes may be information technology that is inappropriate for irrigation projects, poor contractor performance, and/or insufficient training.

Deferred Maintenance

The Program has accumulated a significant deferred maintenance backlog. The GIS personnel who inventoried project canals and structures received basic training for conducting preliminary condition assessments. These assessments, together with other Program information (some that dates back to the 1980s), were then used to calculate a rudimentary estimate of deferred maintenance costs. IPSOD estimates the backlog to be around \$750 million. This estimate is down from \$1.2 billion in FY2004 due to efforts to validate the underlying data. Further, IPSOD officials expect to revise the figure downward again in 2008 due to continued refinement of data, as well as to ongoing rehabilitation.

Without significant changes to the status quo in BIA irrigation projects, the systems will soon become inoperable.

— from BIA's *Irrigation Handbook*, May 2002

A 2006 Government Accountability Office (GAO) audit of Indian irrigation projects questioned the inexact nature of BIA's deferred maintenance cost estimate for two reasons. First, neither engineers nor irrigation personnel conducted the condition assessments. Second, project personnel used varying definitions of deferred maintenance as they worked to validate the original estimates.

Some field officials define deferred maintenance as completing work on time, which means that work schedules could influence the deferred maintenance estimate more than the actual condition of the irrigation infrastructure. Others link the concept of deferred maintenance to impaired utility or functioning of an asset. In this view, as long as water flows to the turnouts, the

irrigation project has no deferred maintenance backlog — regardless of the condition of facilities through which the water passes.

These viewpoints illustrate the uncertainty inherent in estimating deferred maintenance. Both positions are arguably supported by these definitions from the Indian Affairs draft “Asset Management Plan”:

Deferred Maintenance. Maintenance that was not performed when it should have been or when it was scheduled and which, therefore, was put off or delayed for a future period.

Deferred Maintenance Backlog. The unfunded or delayed work required to bring a facility or item of equipment to a condition that meets acceptable codes, laws, and standards and preserves the facility or equipment so that it continues to provide acceptable services and achieves its expected life.

Modernization of facilities would not conventionally be included in estimates of deferred maintenance. When working with infrastructure that is a century old, however, meeting “acceptable standards” necessarily entails some degree of modernization. One project manager we visited believes the deferred maintenance estimate for his site may be twice what it should be because the figure includes a great deal of activity beyond simply rehabilitating the existing infrastructure. On the other hand, another project manager believes the figure cited for his site could easily be doubled if betterment activities, such as lining canals or installing pipelines (acceptable standards for efficient water transport), were to be included.

The standards recognize that there are many variables in estimating deferred maintenance amounts. The standards acknowledge that condition rating is a management function since different conditions might be considered acceptable by different entities as well as for different items . . . held by the same entity.

— *Federal Accounting Standards Advisory Board, Statement of Federal Financial Accounting Standards #6*

Independent auditors from the firm KPMG, in their report on BIA’s financial statements, have also stressed a need for documenting accurate deferred maintenance costs. A facility that is in poor condition is worth less than a facility in good condition and presents a potential liability. We believe Program officials should continue to refine the deferred maintenance estimate by requiring more consistency in how project-level estimates are developed. Currently, they are storing years-old data from a contractor’s estimate of facilities condition and working toward expensive contract efforts to examine each project more closely. At the same time, they are not routinely updating information based on the knowledge of current staff. It seems the desire for comprehensive, independent data on BIA’s facilities has eclipsed the need for timely information. Regular review and update of facilities data by Program staff will provide information useful in 1) assessing Program performance and 2) budgeting for future Program operations.

To do so would require more oversight and focused dialogue across organizational boundaries. The Program already has two working models that could be adapted for this purpose. The

models are program review teams and a financial work group. The concepts of internal peer review and Program-wide communication that these two models, respectively, exemplify can be applied to 1) improving the deferred maintenance estimates at each project; 2) better documenting definitions and policies appropriate to the irrigation function and facilities; and 3) developing training for project managers and staff on the application of these policies in the future.

SUGGESTION 4

Program officials should establish a deferred maintenance working group of regional irrigation engineers, project officials, and representatives of IPSOD and the Office of the Deputy Assistant Secretary for Management to develop consistent policies for deferred maintenance estimation and accounting and to review the deferred maintenance estimates for each project.

PERFORMANCE MEASURES

Updating information on the condition of irrigation facilities is critical to satisfying OMB's requirements for measuring program performance, as well as to improving the reliability of BIA financial statements. BIA received NO responses to 10 PART questions (specified in Appendix E) due to the need for meaningful performance measures and ambitious targets. A lack of

Table 2. BIA Irrigation PART Performance Measures		
Term	Type	Performance Measure
Long-Term	Outcome	Improve the condition of the irrigation projects by eliminating the deferred maintenance backlog by 20XX [target year was never determined; measure now proposed for deletion]
Annual	Output	Complete inventory and preliminary assessment of 100% of Irrigation Projects [proposed for deletion]
Annual	Output	Percent of revenue generating irrigation projects for which comprehensive condition assessments have been completed annually
Annual	Efficiency	Percentage of maintenance projects that are completed within established timeframes
Long-Term	Outcome	Percentage of irrigation projects that have been reviewed during the reporting year and found to be in compliance with regulations
Annual	Outcome	Percent of irrigation projects with identified noncompliance issues for which corrective action plans have been established

Note: The language in the last four measures reflects recent amendments based on measurement rather than goal terminology.

reliable performance information ultimately triggered the **Results Not Demonstrated** designation. BIA responded to OMB's criticisms by establishing the measures we present in Table 2.

Program officials have since proposed deleting the first long-term outcome measure regarding the deferred maintenance backlog. They reason that the supporting annual measures must be complete before appropriate targets can be set and that resources may be inadequate to accomplish the goal. However, a key idea underlying the PART process is the improvement of budget and performance integration. To delete the Program's most outcome-oriented performance measure due to a lack of resources counters the very premise on which the PART is based. Some measure(s) of facilities condition should remain in place so long as BIA retains title to and responsibility for the irrigation infrastructure.

OMB and BIA have agreed to delete the first annual measure regarding completion of a preliminary assessment. They deem this action completed based on the GIS inventory discussed on page 3. Replacing the first two measures with long-term measures for the percent of 1) irrigation structures in acceptable condition and of 2) irrigation canals in acceptable condition results in estimated baselines of 65 percent and 84 percent, respectively. Although IPSOD acknowledges shortcomings in these baseline figures from the GIS inventory, future performance information should become more reliable as Program officials update facilities information.

The current efficiency measure relates to the timely completion of maintenance. At existing funding levels, the Program's performance target for timely completion of maintenance tasks is only 45 percent, and managers deem completion of 50 percent "commendable." With this level of performance, the deferred maintenance backlog will, logically, grow rapidly. However, officials admit that this process measure is exceptionally easy to manipulate because the performers set the schedules against which timeliness is assessed. To provide assurance that project-level performance can be meaningfully assessed, IPSOD should provide guidance on how to set appropriate maintenance schedules and validate a sampling of scheduled tasks during program reviews.

The second long-term outcome measure regarding compliance with regulations was originally a cumulative measure that would increase to 100 percent over time. The Program's proposal to add the qualifying phrase "... during the reporting year ..." seems to make this an annual measure. BIA could strengthen the supporting measure regarding establishment of corrective action plans by measuring the completion of corrective actions rather than establishment of plans. Developing plans in a timely manner may be an appropriate standard for appraising the performance of individual managers. However, it is not an effective indicator of Program performance for PART purposes.

SUGGESTION 5

BIA should strengthen its performance measures by 1) setting goals for the long-term improvement of facilities condition; 2) revising the annual compliance measure to assess the completion of corrective actions; and 3) providing guidance on how to set appropriate maintenance schedules.

BIA's irrigation mission is to deliver available water equitably and in a timely manner. Being able to directly measure mission performance requires expensive water measurement equipment. BIA currently measures water delivery with technology ranging from virtually nonexistent to nearly state-of-the-art. One project official told us of discrepancies between federal and State water measurements that could affect water rights administration. Were this situation to improve, the Program would be able to more reliably measure water delivery and could report efficiency in terms of the loss of water between the source and the user.

SUGGESTION 6

DOI should invest in improvements that will enable irrigation project officials to more reliably measure water delivery and water delivery efficiency.

ASSESSMENT RATES AND BUDGETS

Historically, BIA tempered irrigation rate increases based in part on the economic impact on water users. This tempering of rate increases has resulted in a rate deficiency at most of the irrigation projects.

*— from BIA Notice of
Rate Adjustments in the
Federal Register, 72FR19950,
April 2007*

We made a simple comparison of key statistics between IPSOD and another irrigation-and-power program. The Imperial Irrigation District (IID) in California is said to be the Nation's largest irrigation system. Collectively, BIA's irrigation projects manage more miles of canal and serve greater acreage than IID — with only one-fourth the operating budget.

In proposing assessment rates for each irrigation project, Program officials use the Financial Program Planning System (FPP) to capture the expected cost of annual O&M activities. They divide projected costs by the number of assessable acres in a given project (or within part of a project) to derive the base rate per acre. Program-wide, this comes to an

average of around \$56 per acre served, of which approximately \$35 comes from the users.

Once Program officials have calculated the base assessment rate for O&M, FPP allows them to add 1/40th of the estimated deferred maintenance backlog to try to make the rates reflect full cost. Project officials may or may not take this addition into consideration. To cover the deferred maintenance portion of the full cost formula, BIA would have to raise rates by an average, based on current figures, of \$26 per acre (74 percent). Many officials believe users cannot afford such an increase.

When setting rates, BIA publishes its proposal and solicits public comments in the "Federal Register." Bureau officials meet with interested water users (and water user associations, where established) to discuss the proposed budget. After considering user feedback and any public comments, BIA makes a final decision and publishes the new rate. In some cases, marginal increases do take effect. In other cases, rates have remained fixed for years or even decades, while millions of dollars in maintenance needs have accumulated.

The United Nations Food and Agriculture Organization (FAO) reports that, in irrigation projects around the world, “the conventional approach to rehabilitation has been to wait until deterioration has become severe over a wide enough area that a large rehabilitation project is needed.” This approach often leads to an inefficient cycling of deterioration and rehabilitation. Minor repairs left unattended may lead to the need for major rehabilitation efforts. Consider the BIA facility shown in Figure 4. Officials tell us that problems first arose in the 1960s.

Figure 4. Thousands of Acres at Risk at the Fort Hall Indian Irrigation Project



The maintenance supervisor calls the office to report water along the roadside — a sign that an underground siphon is leaking, despite \$60,000 in recent repairs. The Project does have a substantial amount of money on account for major repairs, but officials fear a full replacement will exceed their means.

OIG Staff Photo

Water flows into a runoff trench along the roadside — a precious resource lost. Beyond the siphon’s discharge, more than 10,000 acres are still receiving irrigation water. This acreage would run dry if the siphon were to fail.

OIG Staff Photo



As an alternative, the FAO promotes a strategy of “incremental infrastructure improvement.” We have adapted this strategy for BIA consideration (see below).

- Program officials —
 - integrate maintenance, rehabilitation, and betterment costs into the same overall financial planning process;
 - may provide incentives based on cost-sharing that are designed to stimulate preventive maintenance and modernization; and
 - use independent financial audits and technical evaluations periodically to strengthen project management.

- Project officials —
 - identify, with technical assistance from Program engineers, needed repairs and improvements;
 - work with water users to prioritize needs; and
 - raise sinking funds — money set aside for specific purposes — from water users via a surcharge on irrigation fees.

Based on data collected in 2002 and 2003, U.S. Department of Agriculture (USDA) national statistics reflect an average irrigation charge of \$42 per acre. Even before adjusting for inflation, this average is 20 percent more than BIA charges today. Although full cost recovery would resolve the Program's funding woes, an immediate rate increase to fully reimburse the projects would be an unreasonable expectation. We suggest Program officials approach budgeting proactively by managing project funds more systematically. Instead of assessing an arbitrary fraction of an outsized deferred maintenance estimate or waiting several years for condition assessment data, each project manager should work with water users to identify the highest priority needs based upon available data and personal knowledge.

Planning for rehabilitation projects may or may not result in the same cost figures as deferred maintenance accounting. Generally, such accounting assumes that repair or replacement of the facility will address identified **physical deficiencies**. In reality, project managers will work to remedy **functional deficiencies**. Such remedies may also come through modifying operations, improving technology, reassessing functional requirements, or redesigning to meet requirements through a different set of facilities. It is, therefore, important that managers base fiscal planning on each project's plans for operating, maintaining, rehabilitating, and improving the irrigation infrastructure rather than on the deferred maintenance estimate.

Beyond basic charges for labor and supplies, the annual costs used in setting irrigation rates may include the maintenance of reserve and sinking funds. A reserve fund is a reasonable balance maintained for emergency repairs or other contingencies and a sinking fund is money set aside for purposes such as life-cycle replacement of major equipment or anticipated infrastructure rehabilitation projects. Proper use of these funds is critical to the long-term sustainability of the irrigation projects.

To manage sinking funds, project managers should use identified needs and the best available estimates of associated costs to develop project-level plans to rehabilitate and better the irrigation infrastructure over the long-term. They should also develop long-term plans that document 1) the amount of funds required to complete the work, 2) how much money users provide annually, and 3) the length of time needed to save the necessary amount. To the extent possible, regional irrigation engineers should validate project priorities during on-site visits.

SUGGESTION 7

BIA should systematically prepare project-level plans for the use of sinking funds to meet maintenance, repair, and improvement priorities.

In addition, project managers should discuss their sinking fund management plans at water user meetings. This communication will foster understanding of what the assessments will fund over the coming year and of the long-term risks of not collecting sufficient monies. Following GAO's 2006 audit report, the Director of BIA issued a policy memorandum to regional directors requiring each irrigation project manager to hold a minimum of two water user meetings each year. The BIA "Irrigation Handbook" already included a similar recommendation, but the policy memorandum makes the meeting provision mandatory. Regional irrigation engineers are required to participate in one such meeting at each project in their region, and program reviews address each project's compliance with the user meeting requirement.

Attendance at water user meetings varies. One project manager reported that the last meeting convened with seven BIA staff — and only five water users out of the thousands served. Nevertheless, we believe BIA should continue to enforce the new policy to improve communication with stakeholders and enhance understanding of BIA proposals.

We also suggest the Program include more information in public notices about each project's maintenance needs. Currently, BIA publishes existing and proposed rates for each project. The reader has no insight into unmet needs beyond a general acknowledgement of a "rate deficiency." Instead, the notice indicates that information is available at each project office. Unless the reader actively seeks details, he or she learns only that BIA wants to charge water users more and does not understand that a proposed increase of \$2 or \$3 per acre is comparatively little when considering an estimated deferred maintenance backlog of \$1,000 per acre.

Suggestion 8

BIA should, when proposing rate adjustments, publish a description and an estimate of the maintenance needs for each project.

The FY2006 earmarks that restricted funding to five projects in Montana and Wyoming were contained in the Senate Appropriations Committee report and not in the enacted appropriation. As a result, the restrictions do not have the force of law and did not carry over into the omnibus continuing resolution for FY2007.

In addition to user assessments and direct Congressional investment, there are other means available to address the needs of irrigation projects. For example, the State of Wyoming has reportedly committed to matching the \$3.5 million slated for rehabilitation work at the Wind River Indian Irrigation Project. Also, BOR has announced more than \$200,000 in "Water 2025" grant funding for improvements at the Uintah Indian Irrigation Project (featured on the cover of this report). Other projects should pursue these and other alternative sources of funding to the maximum practical extent.

Even though the earmark restrictions did not carry over to FY2007, DOI officials decided to fund the same five projects funded in FY2006. They explained that their intent was to capitalize on the previous assessment and prioritization efforts, and that limiting the work to one region would

improve efficiency. Even allowing for the contribution from the State of Wyoming, it is unclear to us whether officials allocated construction funds to the Program's most pressing needs. For example, rehabilitation of Tyhee Siphon, which is featured in Figure 4, is clearly important to the Fort Hall Project. We know this without benefit of assessment and prioritization of the Project's 3,000 other structures. IPSOD could have compared Tyhee Siphon's need for rehabilitation to the top ranked needs of other projects instead of restricting the funds to the five projects already receiving money. To leverage the Program's limited discretionary funds, IPSOD could consider allocating rehabilitation funding based on an internal competition among projects, with investments requiring a matching commitment of project sinking funds.

SUGGESTION 9

IPSOD should consider priority needs from all projects in allocating rehabilitation funding, in addition to seeking other funding opportunities.

DOI's budget justification for the Program reflects a long-term goal of reducing deferred maintenance, yet does not request sufficient funding to meet even current maintenance needs. DOI has not communicated information about deteriorating facilities, the need for rehabilitation, or the risks associated with continued degradation to the Appropriations Committees. Thus, the Program neither charges its users the full cost of maintaining and rehabilitating irrigation projects, nor informs the Congress of the anticipated shortfall.

Subsidies to the irrigation sub-sector may be justified when capital-intensive irrigation development is required to meet national policy objectives.

— United Nations Food and Agriculture Organization

The desired benefits of investment in the Program are agricultural productivity and sustainable economic return for Indian communities. We believe Program officials are responsible for informing the Congress of the state of authorized irrigation facilities. DOI should request a level of funding appropriate to the Program's contribution to agricultural productivity and economic development — issues of national importance.

SUGGESTION 10

DOI should better inform the Congress of irrigation project needs and benefits.

BILLING AND COLLECTION

We did not audit the Program's billing records and procedures, but we did discuss billing practices in general with project staff. Program officials have implemented a form of internal peer review that teams use to evaluate each project for compliance with regulations, policy, and procedures. The teams consist of IPSOD and regional personnel and peers from another project or regional office. Project officials are aware of auditor concerns about the lack of segregation of billing and collection duties, and they rely on supervisory review, program review, and audits of the Bureau's annual financial statements to provide assurance of adequate control.

Water user assessments should be set to cover a project's administrative expenses, as well as to fund general O&M activities. Such costs can be compounded when tracts are split. For example, a 40-acre agricultural tract could be subdivided into 160 residential lots. In that case, BIA would need to track ownership status for 160 accounts instead of 1 even though the irrigation system operator would still deliver water to a single turnout. At \$35 per acre, BIA would have previously issued a \$1,400 collection notice to a single farmer. With the tract developed for housing, BIA would need to issue 160 bills for \$8.75 each.

Project managers currently address administrative costs using the three methods described below.

After a period of rapid expansion of irrigated area worldwide from the 1950s to the early 1980s, many governments found it difficult to finance the recurring costs of irrigation or to collect water charges from farmers.

— United Nations Food and Agriculture Organization

Minimum Charge. Using this method, project officials would establish a fixed dollar amount as the minimum charge per account. In our example above, they would issue to each water user a collection notice for the greater of the calculated assessments (\$8.75) or for a previously established minimum charge.

A number of BIA project officials levy a minimum charge, which ranges from \$14 to \$65. If these charges are too low, officials risk collecting less than the cost of servicing a given account. Conversely, if the charges are too high, users on small lots will pay a disproportionate share.

Minimum Bill. Using this method, project officials would identify a minimum assessment amount and withhold collection notices for anything below it. They would then accumulate these small charges into a year-end request for debt cancellation. At year's end, officials would "write off" these charges as not worth pursuing.

Officials of at least one BIA project reported using this approach in a quest for administrative efficiency. Consequently, small-lot (mostly residential lawn and garden) users receive free service, and others have to bear the price of the resultant deficit in terms of either higher assessments or unfunded maintenance needs.

Billing Charge. Using this third method, officials would estimate administrative costs separately from general O&M costs and levy fees accordingly.

For example, BIA provides billing services for the BOR Fort Yuma Indian Irrigation Project. It covers the administrative costs by adding \$7 per acre to BOR's O&M assessments. BIA could apply the same approach for the projects it operates, and the administrative cost would attach equally to each water user.

SUGGESTION 11
BIA should institute a consistent billing approach to include distribution of administrative costs fairly to each account. Officials should cancel debts only after appropriate collection efforts fail.

Project officials expressed concern about shortcomings in the Program’s data management. BIA uses the National Irrigation Information Management System (NIIMS) for billing and collections tracking. However, some field officials say they find NIIMS data unreliable. Therefore, they maintain hard-copy records and perform rate and account balance calculations offline, as they have in the past. In some cases, they say, the system calculates different rates for users with the same acreage and account characteristics. Corrections must be made manually and often require working through support contractors who insist that the system is correct, even though they cannot explain why balance-due figures are inconsistent. A 2006 Program review suggested that outdated procedures in manual processing led to the apparent discrepancies between the local records and NIIMS data but provided no explanation for variances between individual records within NIIMS.

Further, NIIMS does not meet all of the Program’s billing data management needs. The Colorado River Indian Irrigation Project uses NIIMS to track assessments for its basic allotment of 5.75 acre-feet of water per acre. However, project officials also allow users to purchase water above this level for an additional fee that is based on the volume of “excess” water requested. Officials tell us that NIIMS is unable to track and bill for this activity, so they maintain Microsoft Excel spreadsheets locally to account for excess water transactions.

SUGGESTION 12

IPSOD and support contractors should work with project officials to investigate perceived discrepancies in NIIMS data and, if necessary, correct the business rules and the data. They should also consider enhancing or replacing NIIMS to accommodate various rate structures and to ensure a complete accounting of billing and collection data.

Chronic water shortages, explosive population growth, over-allocated watersheds, environmental needs, and aging water facilities are combining to create the potential for crisis and conflict over water.

*— Dirk Kempthorne,
Secretary of the Interior*

With increasing demand for water, efficient use of this limited resource becomes more important. BIA coordinates technical and financial assistance with other agencies to enable farmers to implement conservation practices but could do more. For example, BIA could further promote conservation by redesigning its rate structure for irrigation. A move toward greater use of volumetric pricing, as opposed to area pricing, would lower total cost for those who use water more efficiently. Volumetric pricing is charging based on the amount of water used, and area pricing is charging based on the number of acres irrigated.

Fair execution of volumetric pricing would require reliable water measurement, as we discuss on page 10. Implementing this change would require full consultation with affected tribes.

SUGGESTION 13

BIA should consult with tribes and water users to restructure irrigation assessments to better promote water conservation.

FIELD OPERATIONS SUPPORT

In its 2006 audit report, GAO commented that “. . . officials with the authority to oversee project managers’ decisionmaking lack the technical expertise needed to do so effectively, while the staff who do have the expertise lack the necessary authority.” This observation stems from the Bureau’s organizational structure. As a central program office, IPSOD falls under the BIA Deputy Director for Trust Services, while the irrigation project managers report to the regional directors, who fall under the BIA Deputy Director for Field Operations. In most cases, the irrigation project managers report through their respective agency superintendents. Regional directors do employ regional irrigation engineers to provide functional oversight and technical expertise to projects within their geographic areas, but these engineers do not have line authority over the project managers.

The BIA Director issued a policy memorandum to address this issue without reorganizing the Bureau. The policy supplements an existing Indian Affairs Manual chapter to clarify the roles of IPSOD, the regional irrigation engineers, and the irrigation project managers. Under the policy, IPSOD establishes technical standards and conducts periodic reviews of irrigation operations. Project managers prepare an annual work program that outlines rehabilitation activities for the upcoming year. Regional irrigation engineers exercise approval authority over these plans. We asked Program officials whether contracting officers had been informed that rehabilitation activities require prior approval beyond the project manager. They had not, but IPSOD agreed to coordinate such notification through the office of the Deputy Assistant Secretary for Management (DASM).

Field officials with whom we spoke indicated that the level of expertise and working styles of incumbents are what matters, rather than formal lines of authority within the Irrigation Program. When competent professionals collaborate, either model — functional alignment or geographic alignment— can work.

Discussion of organizational matters outside the Irrigation Program elicited stronger reactions. Beyond technical irrigation and engineering support, projects require IT, human resource, and procurement support. Field officials say that information technology capabilities were lost and service declined after Indian Affairs reorganized and shifted responsibilities between the Denver and Albuquerque support centers. We encountered differing opinions on whether procurement support had improved or declined since DOI centralized the contracting function for all Indian Affairs activities under DASM. Opinions seemed to depend on how well the assigned contracting officers understand irrigation projects’ needs and the local market for services.

The Uintah Indian Irrigation Project is able to bypass many of these concerns. As authorized by the Congress in 1992, the water user association there operates and maintains the project’s 6,000 structures and 600 miles of canals and ditches. From a high of about 20, only 4 BIA personnel remain to oversee the cooperative agreement.

Since the mid 1980s there has been an upsurge in efforts by governments around the world to transfer management for irrigation systems from government agencies to farmer organizations or other non-governmental entities.

— United Nations Food and Agriculture Organization

Responsibility for day-to-day operations now falls to the association and its contractors, who have considerable flexibility to deal with project requirements in a timely manner. BIA staff provide technical assistance and guidance to the association and monitor performance under annual agreements.

Not every community has users willing and able to effectively run project operations. Indeed, BIA transferred operations at the Uintah Project over a 5-year period, as the association board learned its responsibilities and assumed more of the duties. Still, the association design ensures that both Indian and non-Indian water users are represented and that the elected board members play an active, central role in managing the project for the benefit of all users. Three other projects (Flathead, San Carlos Joint Works, and San Carlos Indian Works) are in the process of turning over operations to user groups, and legislation is pending in the Senate to direct turnover at a fourth (Duck Valley). BIA plans to assess the feasibility of transferring management of other projects to water user groups. In the meantime, we suggest Program officials 1) examine the expectations and perceptions of project managers regarding the quality and timeliness of procurement support and 2) work with DASM to better satisfy project requirements.

SUGGESTION 14

**IPSOD should work with DASM to assess and address shortcomings
in procurement support for irrigation projects.**

At the Colorado River Irrigation Project, officials have opened their books to the Tribe, and some members of the Tribe's Irrigation Committee participate in the budget process. Because of this open environment, good rapport exists between the Tribe and Project officials. When the assessment rate is increased, problems do not develop because the users have been part of the rate-setting process and understand the need for the increase.

While the Colorado River Project is reputed to be BIA's "best managed," no formal mechanism for sharing best practices with other projects seems to exist. Existing information-sharing opportunities presented by Program-wide rate-setting/FPP conferences and use of cross-organizational program review teams and the Financial Working Group are valuable. They may, however, be too task-focused to facilitate communication of a broader range of ideas. A periodic newsletter, best practices forum, or other mechanism for exchanging information could be helpful in replicating best practices from project to project.

Suggestion 15

BIA should devise a means of sharing best practices among projects.

Many federal irrigation projects on Indian reservations lacked feasibility studies prior to their initial construction. Had such studies been available, decision-makers of the day would likely have had to declare some of the projects infeasible. In response to a recommendation from GAO, BIA is working on a contracting action to conduct financial sustainability studies. The draft requirements document addresses the key factors underlying project sustainability. It also addresses the need to 1) estimate the cost of betterment alternatives, such as modernization of

facilities or modification of the service area and 2) assess stakeholder opinions on possible O&M turnover to water user associations.

These studies should provide valuable information as project managers plan for future rehabilitation and modernization investments. At the time of our inquiry, however, the contracting effort was behind schedule. In fact, it was unfunded. Further, much of the work cannot be undertaken until condition assessments are completed. As we discussed previously, CCAs are also behind schedule. However, the more focused approach we discuss under “Facilities Information” may provide a sufficient basis to examine alternatives broadly.

The Program would benefit from a master schedule that lays out when condition assessments, program reviews, maintenance system implementation, and sustainability studies are scheduled to take place at each project. The schedule duration would depend on available resources. Currently, it seems as though every project manager can expect a program review on a regular basis. However, we were not provided a schedule for deployment of the maintenance management system. Whether — let alone when — expertise will be available to complete the condition assessments and sustainability studies remains an open question.

SUGGESTION 16
IPSOD should develop an integrated schedule of key actions.

APPENDIX A: History and Use of the PART

Planning and performance monitoring are required by law

In 1993, the Congress found federal managers to be “disadvantaged in their efforts to improve program efficiency and effectiveness, because of insufficient articulation of program goals and inadequate information on program performance.” The Government Performance and Results Act (Public Law 103-62), or GPRA, was passed to promote a focus on results by requiring federal agencies to engage in strategic planning and performance reporting.

Objectives and results of federal programs are assessed during budget formulation

The “President’s Management Agenda,” which includes a U.S. Government-wide initiative to improve budget and performance integration, was published in 2001. The Agenda calls for agencies to monitor program performance and to incorporate performance review into budgetary decision-making.

To support this initiative, the Office of Management and Budget (OMB) instituted a new activity within the context of budget formulation. OMB uses a standard questionnaire called the Program Assessment Rating Tool (PART) to engage federal programs in a review of program design, strategic planning, program management, and the achievement of results that demonstrate value for the taxpayer. Through the PART process, OMB rates programs as **Effective**, **Moderately Effective**, **Adequate**, or **Ineffective**. Alternatively, OMB deems programs that are unable to provide reliable performance information (thus precluding assignment of a program rating) **Results Not Demonstrated** and recommends establishment or improvement of mechanisms for performance measurement.

OMB has found that many DOI programs lack performance information

Of the 72 DOI programs assessed between 2002 and 2007, OMB rated only eight programs (11 percent) **Effective** and placed 16 programs (22 percent) in the category **Results Not Demonstrated**. DOI programs assessed through the PART process reflect over \$9 billion dollars in annual budget authority. Approximately one quarter of this spending is associated with programs that lack reliable performance information.

PART Ratings for DOI Programs, 2002-2007	Number of Programs	Percent of Programs
Effective	8	11
Moderately Effective	23	33
Adequate	25	34
Ineffective	0	0
Results Not Demonstrated	16	22
TOTAL	72	100

PART findings can be used to 1) justify termination or substantial curtailment of federal programs, 2) support legislative or fiscal enhancements, or 3) promote management improvements. OMB publishes PART results on its ExpectMore.gov Web site, together with recommended improvement actions for every program it has assessed. Agency officials and program managers are expected to follow up on these recommendations and to keep OMB, and ultimately the public, apprised of progress through updates of the information posted to ExpectMore.gov and through internal communications. OMB then reassesses programs on schedules developed in consultation with responsible agencies.

<p align="center">APPENDIX B:</p> <p align="center">Sites Visited or Contacted</p>	
<p align="center">Irrigation Project Sites</p>	
Colorado River Indian Irrigation Project, Colorado River Indian Reservation (Arizona)	
Fort Hall Indian Irrigation Project, Shoshone-Bannock Indian Reservation (Idaho)	
U.S. Bureau of Reclamation Fort Yuma Indian Irrigation Project, Fort Yuma Quechan Indian Reservation (Arizona/California)	
San Carlos Indian Irrigation Project — Joint Works (Coolidge), Gila River Indian Reservation (Arizona)	
San Carlos Indian Irrigation Project — Indian Works (Pima), Gila River Indian Reservation (Arizona)	
Uintah Indian Irrigation Project, Uintah and Ouray Indian Reservation (Utah)	
<p align="center">Other Offices</p>	
Bureau of Indian Affairs Division of Irrigation, Power, and Safety of Dams Washington, DC	
Bureau of Indian Affairs Division of Irrigation, Power, and Safety of Dams Phoenix, Arizona	
Bureau of Indian Affairs Northwest Region Portland, Oregon	
Bureau of Indian Affairs Western Region Phoenix, Arizona	

APPENDIX C: Index of OMB Improvement Plan Actions by Report Section	
Prior Audit Recommendation	Section in this Report
OMB Recommendation #1: Address and Correct . . . Audit Deficiencies.	
<p>OIG Recommendation 1996-2: Develop project budgets and assessment rates based on accurate estimates of the full costs of properly operating, maintaining, rehabilitating, and replacing the projects' facilities and equipment.</p> <p>OIG Recommendation 1996-4: Ensure that project offices comply with Departmental billing requirements.</p> <p>GAO Recommendation 2006-1: Provide the necessary level of technical support to project managers.</p> <p>GAO Recommendation 2006-2: Require project managers to meet at least twice annually with water users.</p> <p>GAO Recommendation 2006-3: Conduct studies to determine the financial sustainability of the projects.</p> <p>KPMG Recommendation 2007-1: Develop lines of authority to ensure that deferred maintenance estimates are submitted to proper personnel on a timely basis and that adequate . . . support is provided to personnel in the field developing the estimates.</p> <p>KPMG Recommendation 2007-2: Implement a management information system to track the deferred maintenance estimates associated with [irrigation facilities] to ensure those estimates are accurate.</p>	<p>Assessment Rates and Budgets</p> <p>Billing and Collections</p> <p>Support for Field Operations</p> <p>Assessment Rates and Budgets</p> <p>Support for Field Operations</p> <p>Support for Field Operations</p> <p>Facilities Information</p>
OMB Recommendation #2: Compile an Inventory of [Facilities Condition] on . . . Authorized Irrigation Projects.	
<p>OIG Recommendation 1996-1: Develop comprehensive and accurate inventories of project facilities and equipment for all projects with operation and maintenance rates. The inventories should include the location, age, physical condition, and estimated remaining useful life for each facility and piece of equipment.</p>	<p>Facilities Information</p>
OMB Recommendation #3: Develop meaningful performance measures to guide informed management and budgetary decisions, such as [facilities condition] and funding needs.	
<p>[N/A]</p>	<p>Performance Measures</p>

APPENDIX D: Table of Suggestions		
Number	Suggestion	Page
Facilities Information		
1	BIA should reconsider its condition assessment strategy in order to provide a timely and cost-effective means for project managers to assess and communicate current conditions and priorities.	5
2	BIA should work closely with the Office of the Solicitor to assess BIA's legal standing in claiming rights-of-way for irrigation and enforce such rights to ensure worker safety and operational efficiency.	5
3	Program and information technology officials should identify, analyze, and address the hurdles in implementing the standardized maintenance management system. Causes may be information technology that is inappropriate for irrigation projects, poor contractor performance, and/or insufficient training.	7
4	Program officials should establish a deferred maintenance working group of regional irrigation engineers, project officials, and representatives of IPSOD and the Office of the Deputy Assistant Secretary for Management to document consistent policies for deferred maintenance estimation and accounting and to review the deferred maintenance estimates for each project.	9
Performance Measures		
5	BIA should strengthen its performance measures by 1) setting goals for the long-term improvement of facilities condition; 2) revising the annual compliance measure to assess the completion of corrective actions; and 3) providing guidance on how to set appropriate maintenance schedules.	10
6	DOI should invest in improvements that will enable irrigation project officials to more reliably measure water delivery and water delivery efficiency.	11
Assessment Rates and Budgets		
7	BIA should systematically prepare project-level plans for the use of sinking funds to meet maintenance, repair, and improvement priorities.	13
8	BIA should, when proposing rate adjustments, publish a description and an estimate of the maintenance needs for each project.	14
9	IPSOD should consider priority needs from all projects in allocating rehabilitation funding, in addition to seeking other funding opportunities.	15
10	DOI should better inform the Congress of irrigation project needs and benefits.	15

Billing and Collection		
11	BIA should institute a consistent billing approach to distribution of administrative costs fairly to each account. Officials should cancel debts only after appropriate collection efforts fail.	16
12	IPSOD and support contractors should work with project officials to investigate perceived discrepancies in NIIMS data and, if necessary, correct the business rules and the data. They should also consider enhancing or replacing NIIMS to accommodate various rate structures and to ensure a complete accounting of billing and collection data.	17
13	BIA should consult with tribes and water users to restructure irrigation assessments to better promote water conservation.	17
Field Operations Support		
14	IPSOD should work with DASM to assess and address shortcomings in procurement support for irrigation projects.	19
15	BIA should devise a means of sharing best practices among projects.	19
16	IPSOD should develop an integrated schedule of key actions.	20

APPENDIX E: PART Questions that Elicited a NO Answer

Inventory of Facilities Condition

PART Question 2.2. Does the program have ambitious targets and timeframes for its long-term measures?

PART Question 2.3. Does the program have a limited number of specific annual performance measures that can demonstrate progress toward achieving the program's long-term goals?

PART Question 2.4. Does the program have baselines and ambitious targets for its annual measures?

PART Question 4.2. Does the program (including program partners) achieve its annual performance goals?

Performance Information

PART Question 2.1. Does the program have a limited number of specific long-term performance measures that focus on outcomes and meaningfully reflect the purpose of the program?

PART Question 2.2. Does the program have ambitious targets and timeframes for its long-term measures?

PART Question 2.3. Does the program have a limited number of specific annual performance measures that can demonstrate progress toward achieving the program's long-term goals?

PART Question 2.4. Does the program have baselines and ambitious targets for its annual measures?

PART Question 2.5. Do all partners (including grantees, sub-grantees, contractors, cost-sharing partners, and other government partners) commit to and work toward the annual and/or long-term goals of the program?

PART Question 2.7. Are budget requests explicitly tied to accomplishment of the annual and long-term performance goals, and are the resource needs presented in a complete and transparent manner in the program's budget?

PART Question 3.1. Does the agency regularly collect timely and credible performance information, including information from key program partners, and use it to manage the program and improve performance?

PART Question 3.2. Are federal managers and program partners ... held accountable for cost, schedule and performance results?

PART Question 3.4. Does the program have procedures (e.g., competitive sourcing/cost comparisons, IT improvements, appropriate incentives) to measure and achieve efficiencies and cost effectiveness in program execution?

PART Question 4.1. Has the program demonstrated adequate progress in achieving its long-term performance goals?

PART Question 4.2. Does the program (including program partners) achieve its annual performance goals?

Audit Deficiencies

PART Question 1.4. Is the program design free of major flaws that would limit the program's effectiveness or efficiency?

PART Question 2.6. Are independent evaluations of sufficient scope and quality conducted on a regular basis or as needed to support program improvements and evaluate effectiveness and relevance to the problem, interest, or need?

Report Fraud, Waste, Abuse, and Mismanagement



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