



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

THE BUREAU OF RECLAMATION DID NOT EFFECTIVELY MANAGE THE SAN LUIS DEMONSTRATION TREATMENT PLANT

This is a revised version of the report prepared for public release.



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

Memorandum

NOV 13 2019

To: Brenda Burman
Commissioner, Bureau of Reclamation

From: Mark L. Greenblatt
Inspector General

Subject: Final Evaluation Report – The Bureau of Reclamation Did Not Effectively Manage
the San Luis Demonstration Treatment Plant
Report No. 2017-WR-048-B

This memorandum transmits our final report detailing our evaluation of the Bureau of Reclamation's (BOR's) management of the San Luis Demonstration Treatment Plant (Demo-Plant) in the San Luis Unit of the Central Valley Project, located in California.

We make seven recommendations to address the weaknesses in the BOR's management of the Demo-Plant. Based on the BOR's response we consider Recommendation 1 resolved but not implemented and Recommendations 2 – 7 unresolved. We will refer Recommendation 1 to the Assistant Secretary for Policy, Management and Budget to track implementation and Recommendations 2 – 7 for resolution.

This is the final in a series of reports about the Demo-Plant. On November 27, 2017, we issued a management advisory about funding changes and preliminary audit findings and made three recommendations to increase the BOR's oversight of the cooperative agreement. On July 12, 2018, we issued an audit report on the cooperative agreement, identifying questioned costs and several significant internal control weaknesses. We made 22 recommendations to help resolve the questioned costs and to ensure compliance with State and Federal regulations.

If you have any questions regarding this memorandum or the subject report, please contact me at 202-208-5745.

The legislation creating the Office of Inspector General requires that we report to Congress semiannually on all audit, inspection, and evaluation reports issued; actions taken to implement our recommendations; and recommendations that have not been implemented.

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Results in Brief

We evaluated the Bureau of Reclamation's (BOR's) management of the San Luis Demonstration Treatment Plant (Demo-Plant). The Demo-Plant did not provide the agricultural drainage services that are required by statute and did not consistently meet operational performance goals. In addition, the BOR did not provide effective oversight of the cooperative agreement for operation and maintenance of the Demo-Plant. As a result, the BOR spent a reported \$67.8 million for a project that does not meet its legal obligation to provide drainage services and that has not consistently met operational performance goals.

The Demo-Plant did not provide the agricultural drainage services that are required by law and presented in San Luis Unit drainage planning documents because the plant does not dispose of salts (a key part of the drainage process) and was not built to perform this function. The BOR built the Demo-Plant because it was directed by the court in 2000 to take action to address its drainage obligation. When construction of the Demo-Plant began in 2012, the BOR acknowledged that the Demo-Plant did not provide drainage services, but stated in 2017 that it now envisions the Demo-Plant to provide drainage services to the northern area of the San Luis Unit, including the Panoche Drainage District. In discussions with BOR officials and in reviewing plant documentation, we learned that, as designed and built, the Demo-Plant does not have the functionality necessary for agricultural drainage.

In addition, the Demo-Plant did not continuously meet its performance goals as referenced in the cooperative agreement. It did not meet these goals, in part, because of equipment malfunctions and performance data issues. We also found that the Demo-Plant had no firm criteria for operation standards. Without definitive criteria it is difficult to fully determine the Demo-Plant's success, but both the performance data and the operational reports we reviewed showed that the plant's performance goals have not consistently been achieved.

Finally, the BOR did not provide effective oversight of the cooperative agreement for the Demo-Plant because the BOR (1) did not use the appropriate legal instrument to fund the operation and maintenance of the Demo-Plant, (2) did not write a clear statement of work for the cooperative agreement, and (3) did not conduct sufficient cost reviews of the invoices. As a result, the BOR paid inappropriate costs to the Panoche Drainage District and made it difficult for involved parties to determine whether work tasks had been completed. As of August 2019, the Demo-Plant had not been operating for at least 6 months (since February 2019).

We make seven recommendations to address the weaknesses in the BOR's management of the Demo-Plant. The BOR responded to our draft report on May 17, 2019. Based on the response, we consider Recommendation 1 resolved but not implemented and Recommendations 2 – 7 unresolved. We will refer Recommendation 1 to the Assistant Secretary for Policy, Management and Budget to track implementation and Recommendations 2 – 7 for resolution.

Introduction

Objective

Our objective was to answer the following questions:

1. Did the San Luis Demonstration Treatment Plant (Demo-Plant) provide agricultural drainage services consistent with statutory mandate and as presented in San Luis Unit planning documents?
2. Did the Demo-Plant meet operational performance goals stated in the Design and Operating Criteria referenced in the cooperative agreement?
3. Did the Bureau of Reclamation (BOR) provide effective oversight of the cooperative agreement?

See Appendix 1 for the scope and methodology of this evaluation.

Background

San Luis Unit Drainage Services

The San Luis Act of 1960 (Pub. L. No. 86-488) requires the BOR to provide drainage services to water districts in the San Luis Unit of the Central Valley Project, located in California, including the Panoche Water District.¹ The BOR initially provided drainage services through the San Luis Drain, but it was shut down in 1985 due to negative effects on wildlife at Kesterson Reservoir in the San Luis National Wildlife Refuge. Shortly afterward, as recourse for losing these drainage services, water districts began filing Federal lawsuits. In a 2000 lawsuit, the U.S. Court of Appeals for the Ninth Circuit reconfirmed the BOR's obligation to provide drainage services under the San Luis Act of 1960 but allowed the BOR to determine the method.

The BOR then prepared San Luis Unit drainage planning documents, which included the final environmental impact statement and decision, and a feasibility study to determine the best methods for addressing drainage problems and needs. The purpose of these planning documents was to develop an action plan for drainage services that achieve long-term sustainable salt and water balance for successful crop growth. Due to the high costs of the proposed action plan, the BOR later pursued the Demo-Plant, which was a smaller, less expensive project and not a part of the planning documents. The BOR included the Demo-Plant in its action plan to the U.S. Court of Appeals in 2009 and it thus became part of the BOR's official efforts to comply with the San Luis Act of 1960.

San Luis Demonstration Treatment Plant

In 2012, the BOR awarded a construction contract for the Demo-Plant. The purpose of the Demo-Plant was to demonstrate and operate water treatment processes to collect cost and performance data for the design of a full-scale water treatment facility to be constructed in the

¹ The Panoche Water District and the Panoche Drainage District are related entities, so we use the term "Panoche District" throughout the report to reference either entity.

Westlands Water District. It was designed to evaluate the quality of agricultural drain water and determine the most beneficial treatment processes. The Demo-Plant was not designed to provide drainage, which includes the disposal of salt and other contaminants.

BOR contracting officials told us that the Demo-Plant was completed in 2014 but did not operate properly due to faulty design. To continue showing progress to the U.S. Court of Appeals in accordance with its action plan, the BOR moved to get the Demo-Plant staffed and operating. When the initial attempt to put an operation and maintenance service contract in place failed, the BOR put a cooperative agreement in place.

On June 14, 2016, the BOR awarded Cooperative Agreement No. R16AC00087 to the Panoche District under the statutory authority of the San Luis Act of 1960 to fund operation and maintenance of the Demo-Plant. This agreement changed the purpose of the Demo-Plant by stating it would be used to remove salts and selenium from agricultural drain water in the San Joaquin River Water Quality Improvement Project (SJRIP) area. The Demo-Plant had not been modified, however, to provide for disposal of the salt and other contaminants.

The BOR initially awarded the agreement for \$4.2 million but later increased it to \$4.38 million. The period of performance was June 14, 2016, through December 31, 2018. In 2017, we audited the agreement and in July 2018 issued a report identifying questioned costs amounting to \$213,891 of the \$772,974 audited. We also identified several significant internal control weaknesses. See Appendix 2 for prior audit coverage.

The BOR's reported total costs for the Demo-Plant were \$67.8 million, as of May 18, 2018. The BOR included the Demo-Plant as part of its July 2013 project management plan for the San Luis Unit Westlands Water District Central Subunit Drainage System. In this plan, the BOR stated that it anticipates transferring the operation and maintenance responsibilities of the Demo-Plant to the Panoche District following the cooperative agreement period, even though substantial changes to the plant are needed before it can provide drainage services. A January 2018 addendum to this project management plan states that the Demo-Plant will be considered substantially complete when it can operate treatment processes and systems at specified flow rates.

At the time of our evaluation, the Panoche District expressed that it had no current desire to assume ownership or responsibility for the Demo-Plant. In addition, as of August 2019, the plant had not been operating for at least 6 months (since February 2019).

Findings

The Demo-Plant did not provide the agricultural drainage services that are mandated by statute and presented in the San Luis Unit drainage planning documents and, as of the beginning of 2018, had not consistently met the operational performance goals referenced in the cooperative agreement. In addition, the BOR did not effectively oversee the cooperative agreement.

From these findings, we conclude that the BOR did not effectively manage the Demo-Plant, spending a reported \$67.8 million to-date for a plant that did not provide the salt disposal that is critical to agricultural drainage services and that did not consistently meet its operational performance goals. In addition, the drainage needs, environmental reviews, and cost estimates for the San Luis Unit area are out-of-date; thus, years of additional planning will be needed for any future drainage activities.

Agricultural Drainage Services Not Provided

The Demo-Plant did not provide the agricultural drainage services consistent with the statutory mandate and as presented in San Luis Unit drainage planning documents.

The BOR defines drainage services as managing shallow groundwater by removing or reducing the amount of water near the root zone to maintain a long-term sustainable salt and water balance for agricultural purposes. Salt and selenium are two chemical compounds of primary concern when it comes to drainage. High levels of salt adversely affect crop health and growth, while high levels of selenium are dangerous to wildlife. The Demo-Plant removes and disposes most of the selenium from the water that comes into the plant from SJRIP drainage water. It desalts some of the water, meaning the water is separated from salts leaving the remaining water with the concentrated salt levels and other contaminants. The Demo-Plant does not dispose of the concentrated salt water because it was not built with the capability to do so. It would require disposal technology to dispose of the salt completely, such as evaporation ponds. Instead, at the end of the process, the desalted water is remixed with the concentrated salt water when returned to a nearby drainage ditch that feeds back into the SJRIP. Figure 1 below illustrates the treatment process.

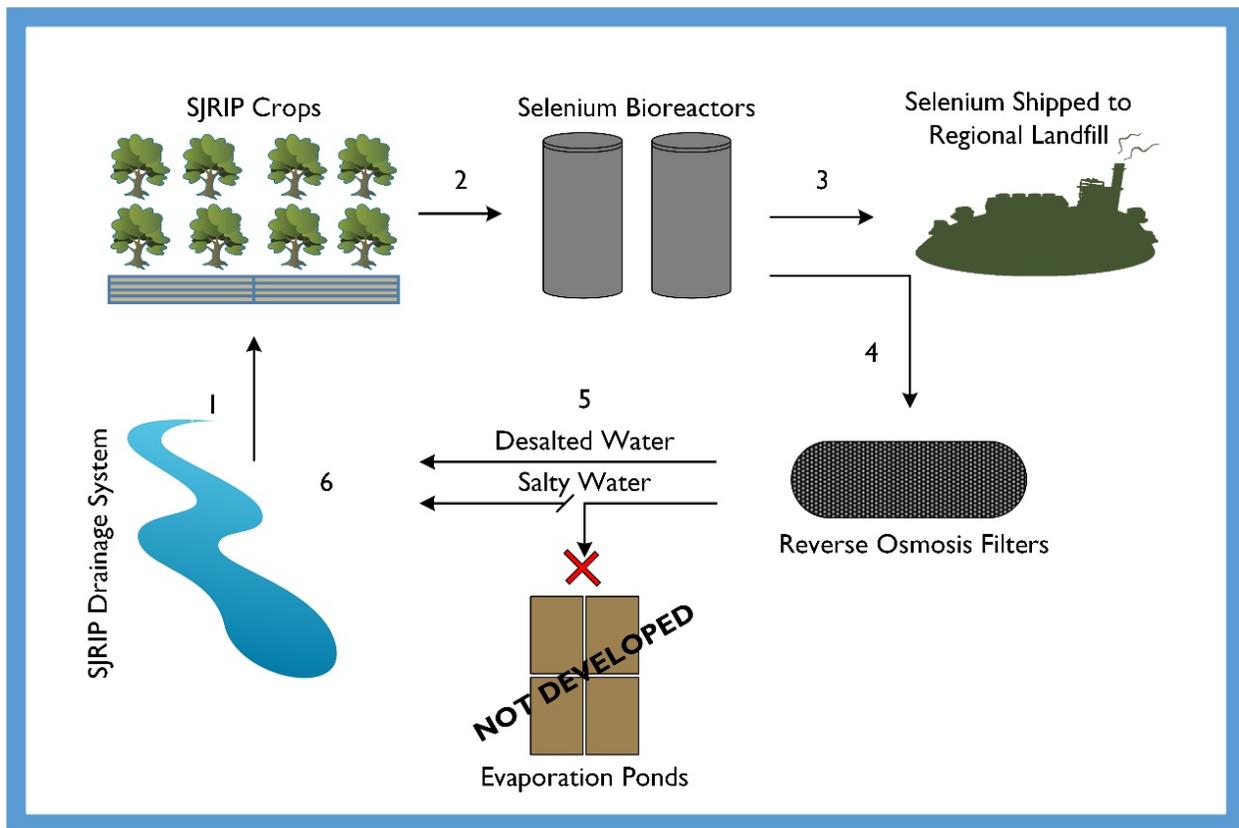


Figure 1. The Demo-Plant process shows that treated water is returned to a drainage ditch in much the same condition as the nontreated water originally sent to the plant. (1) Drainage water is collected from the SJRIP and sent to crops. (2) Drainage water from the crops is sent through the plant's selenium bioreactor tanks. (3) Selenium is removed from the tanks and sent to a regional landfill. (4) Selenium-reduced water is sent through the reverse osmosis filters to desalt the water. (5) The concentrated salt water requires disposal, for instance through the use of evaporation ponds that were not built. (6) The desalted water and concentrated salt water are remixed when sent back to the SJRIP.

The San Luis Act of 1960 requires the BOR to provide drainage services to water districts, including the Panoche Water District, in the San Luis Unit of the Central Valley Project. A court order confirmed this requirement in 2000. In response, the BOR prepared the San Luis Unit drainage planning documents, which included the final environmental impact statement and decision in 2007 to determine the best methods for addressing drainage problems and the need to make the water in the San Luis Unit more useable. This document, and a subsequent 2008 feasibility study, identified various solutions for drainage such as land retirement, evaporation ponds, and water treatment, including permanent water treatment facilities to be built in four locations across the San Luis Unit.

The Demo-Plant was a smaller, less expensive project that was not a part of these planning documents. It was developed as a drainage solution because the BOR was directed by the court to take action but could not afford to do the work identified in its initial planning documents. The Demo-Plant, however, is unable to meet the drainage requirement because it was not designed to dispose of the salts and other contaminants that negatively impact agriculture. Instead, it was

designed and built to test various water treatment processes and technologies to make the San Luis Unit's water more useable, but did not include the necessary disposal elements.

Further, constructing the Demo-Plant allowed the BOR to take some action while it pursued legislative changes to its drainage obligation to the Westlands Water District. If the U.S. Congress approved the legislative changes, the BOR's stated approach to fulfilling its obligation to build a permanent water treatment facility for the Westlands Water District would become unlikely. As of October 2018, the proposed Westlands settlement legislation had not been approved by Congress.

Beginning in November 2009, the BOR included the Demo-Plant at an estimated cost of \$15 million in its action plan to the U.S. Court of Appeals and it thus became part of the BOR's official efforts to comply with the San Luis Act of 1960. The action plan stated that the purpose of the Demo-Plant was to test technologies and determine the proper size and efficiency of a permanent treatment facility to be constructed in the northern part of the Westlands Water District, but the plant could be left in place or expanded for future use. Two years later, the BOR included the Demo-Plant in its updated action plan at an estimated cost of \$37 million. In 2012, the BOR completed an environmental assessment specific to the proposed construction and operation of the Demo-Plant, but the document contained no goal or outcome for the plant's continued operation or disposition upon completion of the 18-month cooperative agreement period. Multiple BOR officials told us that building the Demo-Plant in the Panoche District service area was part of the BOR's action to implement its San Luis Unit drainage planning documents, but a review of these documents showed this not to be the case.

In response to the 2012 environmental assessment, a special interest group commented that the proposed project did not meet the primary drainage need. As the proposed Demo-Plant would not dispose of salts, the need "to achieve a long-term, sustainable salt and water balance in the root zone of irrigated lands in the San Luis Unit and adjacent areas" remained unmet, the group stated. In response, the BOR acknowledged that the Demo-Plant did not provide drainage services and said the plant's purpose was to test technologies for a permanent treatment facility in another area.

At the completion of the Demo-Plant in 2014, the BOR had no plans or clearly defined goals and outcomes for the Demo-Plant's purpose after the cooperative agreement's completion date of December 31, 2018, or for how the plant would fulfill the drainage services required. The absence of clear plans or defined goals for the Demo-Plant was, in part, because of the competing priorities among the involved parties:

- BOR regional officials and legal representatives considered the Demo-Plant to be important to show action to address the drainage obligation.
- BOR technical officials considered the importance of the Demo-Plant to be its ability to test water treatment processes.
- BOR field officials expressed the importance of providing necessary training to Panoche District staff and transferring the Demo-Plant to the Panoche District.

- Panoche District officials expressed interest in ownership of the Demo-Plant only at the right performance capabilities and cost.

These competing priorities resulted in a situation in which the BOR justified building a drainage water treatment project that provides no tangible agricultural benefit with the plan to transfer it to the Panoche District, even though transferring the plant's title is not a simple transaction; it requires congressional approval.

In a 2017 statement to the court, the BOR stated, "While the Demo-Plant was originally intended to demonstrate the viability of selenium treatment technology for implementing drainage actions in the Central Subunit of Westlands, the Demo-Plant is now envisioned to provide drainage service to the Northerly San Luis Districts." In addition, the 2016 cooperative agreement stated that the plant would remove salts and selenium from the drain water within the SJRIP. Through discussions with BOR officials and a review of documentation, we learned that the plant was not built with the ability to dispose of the salts and other contaminants and that the BOR would need to add that function to the plant. This would require a new environmental impact statement or assessment and more land. In addition, the evaporation ponds that are needed for salt and contaminant disposal are, according to one of the drainage planning documents, the most expensive part of the process and estimated at about two-thirds of the total cost. While the total cost for adding them to the Demo-Plant has not been considered, another disposal technology researched for the plant was estimated to cost \$80 million. As such, the Demo-Plant requires substantially more funding to add disposal technology.

In addition to conducting new reviews and planning for adding the disposal function to the Demo-Plant, the BOR will need to revisit the entire drainage planning and implementation approach because it is outdated and drainage needs and costs have changed. The Demo-Plant's 2012 environmental assessment contained a U.S. Fish and Wildlife Service (FWS) review that expressed several concerns about aspects of the plant, as well as about the San Luis Unit drainage planning documents from 2007 and 2008. Specifically, the FWS believed new information on the performance of the biotreatment system and evaporation ponds, and on mercury in drain water, had become available that should be considered for all future actions.

The FWS asserted that before any future full-scale implementation of the project, the FWS would have to revise its 2012 review because it was limited to the Demo-Plant as built and new environmental scientific information had become available. In addition, the drainage needs of the San Luis Unit may be significantly reduced from those stated in the planning documents, potentially up to 65 percent less for the northern water districts. Further, the existing cost estimates for projects laid out in the original planning documents were prepared in 2006, but BOR policy does not allow the revision or updating of cost estimates that are more than 5 years old. Therefore, new cost estimates will be required.

Recommendations

We recommend that the BOR:

1. Determine the cost and benefit of continued operation of the Demo-Plant
2. Establish specific goals or outcomes if it determines that there is a benefit to continued operation of the Demo-Plant at the conclusion of the cooperative agreement
3. Conduct additional planning work to determine current drainage needs, environmental impacts, and costs of the San Luis Unit for future drainage services activities

Performance Goals Not Consistently Met

The Demo-Plant's water treatment systems and processes did not consistently meet performance goals referenced in the cooperative agreement. Further, when we reviewed the standards for the Demo-Plant's performance, we found that the plant had no firm criteria for determining successful operation. Instead, some of the performance goals were modified, including a change in how one of the goals was measured.

The cooperative agreement governing the operation and testing of the Demo-Plant references the Demonstration Treatment Plant Design and Operating Criteria (DOC) as setting the parameters for monitoring the plant system. The DOC sets the specific performance goals related to the various systems and processes and states that a primary testing objective is to demonstrate that—at all times—treated water quality meets target treatment goals. The goals we reviewed are related to amount of water treated, percentage of desalted water, amount of selenium remaining in treated water, and total dissolved solids removed (which includes solid contaminants in addition to salt).

The Demo-Plant is not continuously meeting the goals outlined by the DOC as required, in part, because of problems with the mix of chemicals used, low processing volumes, equipment malfunctions, nonoperating days, and lost testing data. In addition, when we evaluated the DOC, we found that the document states it is a guide for operations and testing, meaning it is not firm criteria. Further, the BOR's technical lead for the Demo-Plant confirmed that some goals in the DOC had shifted by changing testing parameters and substituting some data for at least one of the performance goals. To determine whether the Demo-Plant is operating successfully, criteria that will provide consistent measurement over time are required.

One example of the Demo-Plant not continuously meeting goals is the goal for 50 percent of the treated drainage water to be desalted, leaving the salts concentrated in the remaining water. Figure 2 below shows that the goal can be met but its achievement is inconsistent. We were told by Demo-Plant staff and BOR officials that the current plan was to pursue a much higher recovery rate than 50 percent. We reviewed the rate from June 2016 through January 2018 to see

how much improvement had been made. Figure 2 below shows not only the inconsistency in the recovery rate, it also shows no steady improvement toward meeting the higher goal for salt removal. On the contrary, the figure shows that the recovery rate has passed 51 percent only once during the 20 months of data we reviewed.

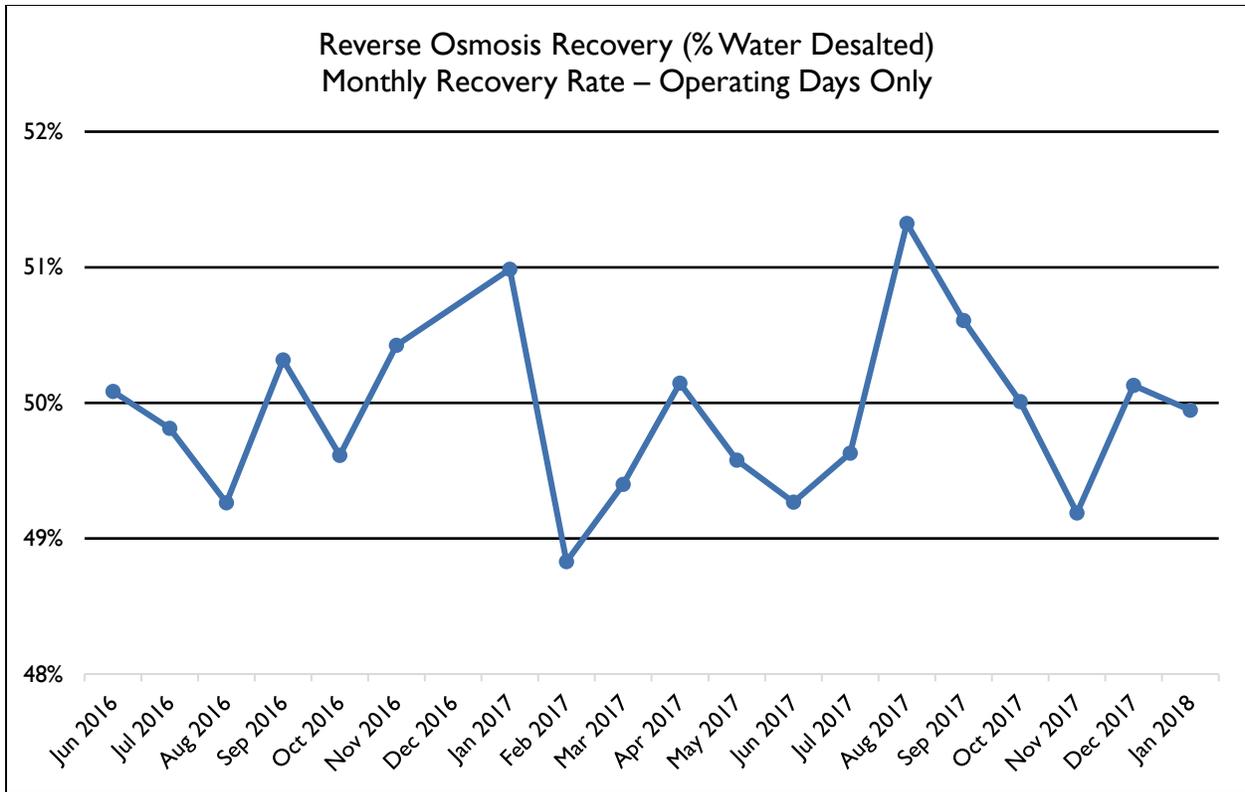


Figure 2. Demo-Plant data show that the goal of desalting 50 percent of the water can be achieved, but success is inconsistent. This chart does not include the days (33 percent of testing days) when no data were provided. Inclusion of those days would drop the average desalt rate to 34 percent.

Key goals and varying outcomes for the same timeframe are presented on the following page in Figure 3.

Demo Plant Goal Reviewed	Results
Treat 288,000 gallons of drainage water per day	Only 2 of 20 months tested showed the plant was meeting or exceeding this amount. The monthly average was more than 43,000 gallons per day short of the goal.
Desalt 50 percent of the treated water	While the data showed an average monthly recovery rate of 50 percent, 33 percent of the days were missing data across the 20 months tested, dropping the average monthly rate to 34 percent, thus not meeting the goal.
Reduce selenium in treated water to 10 micrograms per liter or less	While the data showed the average daily selenium residual met this goal, about 10 percent of the data points showed too much remaining selenium and 2 months were missing data.
Remove 98 percent of total dissolved solids from the treated water	When data outliers were removed from the analysis, the daily averages met this goal.

Figure 3. Demo-Plant water treatment goals in the DOC that we reviewed, along with associated results and testing details.

While it was difficult to fully determine the Demo-Plant’s success without firm criteria, both the data and the operational reports we reviewed showed that the plant had not reached stability and consistency in meeting its performance goals. Problems with consistency are not a new concern; even in 2008, the BOR’s feasibility study noted ongoing consistency problems during pilot testing performed between 2003 and 2006 and suggested additional Demo-Plant testing was needed. Dependable treatment processes are critical to ensure that reliable treatment processes can be identified and measured.

Recommendation
<p>We recommend that the BOR:</p> <ol style="list-style-type: none"> 4. Establish firm criteria for evaluating the Demo-Plant’s future operational performance if the BOR continues Demo-Plant operation

Oversight of the Cooperative Agreement Not Effective

The BOR did not effectively oversee the cooperative agreement because it (1) did not use the appropriate legal instrument to fund operation and maintenance, (2) wrote an unclear statement of work, and (3) conducted minimal cost reviews of invoices.

U.S. Department of the Interior and BOR policies require the use of a contract when acquiring services for the Federal Government. In this case, the agreement was to acquire professional staff services to operate and maintain a plant that directly benefited the BOR in its efforts to meet its statutory duty to provide drainage services. Therefore, the BOR should have used a procurement contract rather than a cooperative agreement to fund the operation and maintenance of the Demo-Plant. While contracts are subject to the Federal Acquisition Regulation, cooperative agreements are subject to Federal cost principles, which are less rigorous regulatory requirements.

According to BOR contracting officials, the BOR initially attempted to put a service contract in place prior to the expiration of the construction contract. Because field officials did not provide necessary information for the project work tasks and goals, the service contract was abandoned. Almost a year after the contracting officials gave field officials notice of the construction contract ending, the BOR created a cooperative agreement. The BOR grants officer, however, claimed to have been given only 2 to 3 weeks to create and implement a cooperative agreement for testing and operations of the Demo-Plant. BOR contracting officials stated there was no reason for the hurried reaction because the BOR knew well in advance that a contract was needed for continued testing and operating of the Demo-Plant. Further, we found documentation that showed BOR field office officials mentioning the use of a cooperative agreement as early as 2010—6 years before putting the cooperative agreement in place.

Department policy requires that obligations for individuals involved in a project be clear, concise, and agreed upon. While the BOR has policy to include statements of work for financial assistance agreements, there is no requirement for them to clearly define tasks and outcomes. The cooperative agreement's statement of work does not clearly define work tasks and expected outcomes, thus making it difficult for the BOR and other involved parties to determine whether tasks should be considered complete and whether the Demo-Plant's performance was successful. For example, we compared the statement of work for the cooperative agreement to the Panoche District's contracts and found some of the agreement and contract elements or information to be unclear.

The Code of Federal Regulations establishes cost and general oversight principles to monitor cooperative agreement costs to determine what is allowable under Federal awards, and BOR policy requires that the [REDACTED] monitor agreements to ensure performance.

The BOR [REDACTED] did not review the Panoche District's cost invoices until the Panoche District was put on agency review (review and approval of costs prior to payment), 8 months after the agreement was awarded. The agency review action happened because the California State Controller issued a report that identified numerous deficiencies related to possible violations of State government code and penal code and weaknesses in the Panoche District's accounting and administrative controls system. Even then, the [REDACTED] reviews were minimal. In our July 2018 cost audit report, we stated that almost 30 percent of the costs approved by the BOR after agency review was instituted were questionable. The [REDACTED] told us she relied on the technical representative or field staff to review and approve the charges and stated that it was not her responsibility to do so. BOR policy, however, states that [REDACTED] [REDACTED] have primary responsibility for the financial aspects of cooperative agreements.

Because the BOR did not provide proper oversight of the cooperative agreement, it paid the Panoche District for costs that were not appropriate. For example, in our July 2018 cost audit report, we questioned costs of \$213,891 that did not have adequate supporting documentation; were excessive or not justified; or were not allowed under Federal regulations, the cooperative agreement, or the Panoche District's third-party contracts (see Appendix 2). In addition, the BOR made it difficult to determine the full meaning of the agreement's terms and conditions and whether the Demo-Plant's performance was successful. In its response to our prior audit report, the BOR stated it would pursue recovery of the inappropriate costs.

Recommendations

We recommend that the BOR:

5. Ensure that appropriate legal instruments are used to acquire goods and services in accordance with law and agency policy
6. Establish policy and procedures to ensure financial assistance agreements have statements of work that are clear, concise, and agreed upon
7. Review and improve the management and internal controls used to review cost invoices for financial assistance agreements

Conclusion and Recommendations

Conclusion

It has been more than 10 years since the BOR began taking action to provide drainage services to water districts in the San Luis Unit area. We found, however, that the Demo-Plant did not provide the agricultural drainage services that are mandated by statute and presented in the San Luis Unit drainage planning documents and, as of the beginning of 2018, had not consistently met the operational performance goals referenced in the cooperative agreement. In addition, the BOR did not effectively oversee the cooperative agreement, spending a reported \$67.8 million on a plant that does not provide agricultural drainage.

The Demo-Plant is a project that the BOR built while it pursued legislative settlement of its drainage obligation. At the time of this evaluation report, however, Congress had not approved legislative settlement with any of the San Luis Unit water districts, so the BOR is considering resuming actions that were part of its San Luis Unit drainage planning documents. Given the amount of time elapsed, the BOR will need to revisit the entire planning and implementation approach as it is outdated and drainage needs and costs have changed.

According to BOR officials, the cost of the Demo-Plant will be repaid by San Luis Unit water districts. The pursuit of repayment, however, will not occur until the BOR classifies the project as substantially complete and determines whether these water districts can pay such costs. When the BOR conducted a repayment assessment of all the San Luis Unit drainage planning and construction costs more than 10 years ago, it concluded that most of the water districts would be unable to repay these costs.

We make seven recommendations to address the weaknesses in the BOR's management of the Demo-Plant.

Recommendations Summary

The BOR responded to our draft report on May 17, 2019, concurring with three recommendations and not concurring with four recommendations (see Appendix 3 for the BOR's full response). Based on the response, we consider Recommendation 1 resolved but not implemented and Recommendations 2 – 7 unresolved. We will refer Recommendation 1 to the Assistant Secretary for Policy, Management and Budget (PMB) to track implementation and Recommendations 2 – 7 for resolution (see Appendix 4 for the status of recommendations).

We recommend that the BOR:

1. Determine the cost and benefit of continued operation of the Demo-Plant

BOR response: The BOR concurred with Recommendation 1 and stated it would produce a cost-benefit analysis of the Demo-Plant by May 31, 2021.

OIG reply: We consider this recommendation resolved but not implemented and will refer it to the PMB for implementation tracking.

2. Establish specific goals or outcomes if it determines that there is a benefit to continued operation of the Demo-Plant at the conclusion of the cooperative agreement

BOR response: The BOR concurred with Recommendation 2. The BOR stated that it established short-term performance criteria for transfer to operation and maintenance status in the Project Management Plan Addendum, dated January 23, 2018. The BOR will continue to perform testing and optimization to identify long-term performance goals after transfer to operation and maintenance status if the BOR determines there is a benefit to continued operation of the Demo-Plant.

OIG reply: The BOR's addendum does not address the finding and recommendation because (1) it lists the estimated goal for transfer to operation and maintenance status as December 2018, which has already passed, and (2) the short-term performance criteria are limited to testing Demo-Plant output and do not provide any information on the intended goals and outcomes for the plant itself. As discussed in this report, the BOR had no plans or clearly defined goals and outcomes for the Demo-Plant upon completion of the cooperative agreement, which ended on December 31, 2018. The BOR's response also did not indicate it would establish those goals or outcomes.

The BOR stated in its response that the plant continues to be a demonstration facility for data collection, but it did not provide a completion date for testing, an intended use for the testing results, a detailed plan for adding a salt and contaminant disposal function, and how the plant will provide drainage services to meet the BOR's statutory mandate. Any further development of the plant would require either access to or acquisition of significantly more property, new planning, and additional financial resources.

In addition, the completion of the cost-benefit analysis is targeted for May 31, 2021, meaning the BOR will continue to operate the plant as a testing facility with no goals, even after spending an estimated \$70 million on operation at the time of our evaluation.

The BOR stated that this finding was based on a misunderstood premise regarding the purpose of the Demo-Plant. We demonstrate in our report, however, that the BOR represented different purposes of the plant in its various planning and operation documents, as well as in several conversations we had with key management officials. For example, planning documents and court testimony stated the plant's purpose was to test technologies and collect cost and performance data for design and implementation of a treatment facility in the Westlands Water District. The cooperative agreement awarded 3 years ago on June 14, 2016, for the operation and maintenance of the Demo-Plant, however, specified that the purpose of the plant was to remove salts and selenium from agricultural drain water in the SJRIP area.

For this recommendation to be considered resolved and implemented, the BOR should determine the Demo-Plant's purpose, the cost and benefit of continued operation, and the goals and outcomes for future operation. Therefore, we consider this recommendation unresolved and will refer it to the PMB for resolution.

3. Conduct additional planning work to determine current drainage needs, environmental impacts, and costs of the San Luis Unit for future drainage services activities

BOR response: The BOR did not concur with Recommendation 3. The BOR stated that it will continue to provide drainage services to the San Luis Unit using an existing Environmental Impact Statement (approved in 2007) and a signed Record of Decision (signed in 2008) and that these documents give it flexibility to respond to changing drainage needs and to make adjustments based on new data. In addition, the BOR stated that it continues to evaluate the drainage needs of the water contractors and will use current data for drainage features when and where appropriate.

OIG reply: The BOR's explanation for its nonconurrence does not address our recommendation because of its reliance on outdated planning documents and cost estimates as well as its focus on a plant that does not currently provide drainage services. As discussed in this report, the San Luis Unit's drainage needs may be significantly reduced from those stated in the planning documents, potentially up to 65 percent less for the northern water districts. Further, the planning documents and cost estimates used are more than 12 years old.

Before additional work is completed and more money is spent on the Demo-Plant, new planning needs to be performed and planning documents updated to evaluate (1) the San Luis Unit's current drainage needs, (2) the plant's performance and impact on drainage since operation began in 2014, and (3) the applicable costs and benefits to meet the San Luis Unit's drainage needs. Further, BOR policy requires new project cost estimates when the estimates are more than 5 years old, so the BOR's statement that it plans on adjusting only the 2008 planning documents violates BOR policy. If the BOR determines the Demo-Plant is necessary and beneficial to meeting the mandate to provide drainage services to the San Luis Unit, the BOR must address the FWS' contention that new environmental reviews are needed for the plant to account for (1) any recent scientific information related to new treatment systems and impact of chemical compounds on drain water, (2) expansion of the plant for disposal technology, and (3) inclusion of the required mitigation efforts. Therefore, we consider this recommendation unresolved and will refer it to the PMB for resolution.

4. Establish firm criteria for evaluating the Demo-Plant's future operational performance if the BOR continues Demo-Plant operation

BOR response: The BOR concurred with Recommendation 4, stating that if the BOR determines there is a benefit to continued operation of the Demo-Plant, it will identify long-term performance goals or outcomes for the plant.

The BOR, however, disagreed with our finding that the Demo-Plant did not consistently meet its operational performance goals. The BOR stated that we misinterpreted the purpose and function of the Demo-Plant and its treatment goals and the meaning of the plant's performance data. In addition, the BOR stated that a test facility is inherently "uncertain and operates experimentally to achieve goals through equipment and process

modifications along with adjustment and optimization of operating parameters.” The BOR further stated that an average recovery rate reaching a target recovery rate is equivalent to the facility reaching its performance goal. The BOR also stated that equipment and software limitations caused the minor variations in the recovery rate and those variations are considered normal and acceptable. It further stated that our recalculation of the rate was incorrect because it was based on days the system was shut down.

OIG reply: The BOR’s proposed action in waiting to identify long-term performance goals or outcomes for the Demo-Plant does not address our recommendation because it has not committed to establishing firm operational criteria. It has committed to looking at long-term performance goals if its cost-benefit analysis (to be completed by May 31, 2021) determines there is a benefit to continued operation of the plant, which is not the same as establishing firm criteria for the plant’s successful operation. As discussed in the report, the BOR’s guidance (the DOC we discussed in our finding) for monitoring the Demo-Plant does not contain any fixed goals or performance outcomes for evaluating the success of the plant’s continued operation.

In addition, we understand the BOR’s statement that testing facilities are inherently uncertain and operated for experimental purposes. The parameters on which they are evaluated, however, should remain constant to objectively review and conclude how the plant and its systems are operating. Such design and operating criteria provide for consistent measurement over time to determine if the plant is operating successfully and assist in gathering baseline or benchmark data to determine the costs and benefits of operation.

For example, the guidance for the Demo-Plant sets the reverse osmosis recovery function at 50 percent “24/7” and does not provide the average equivalent or “minor variation” exceptions that the BOR references as acceptable. If the guidance were firm criteria, the BOR could not claim successful recovery rates, as recovery data were missing for almost 200 of the 610 days covered by our testing period (33 percent of the days). Further, while the BOR stated that we made an error in calculating a 34 percent recovery rate, we followed the parameters set in the DOC to calculate the rate. The BOR’s assertion that it can choose to remove one-third of the data points because the Demo-Plant was not functioning is contrary to the DOC parameters and therefore invalid.

For this recommendation to be considered resolved, the BOR should establish firm or fixed criteria for evaluating any future operation of the Demo-Plant, even if the BOR considers the plant to be in an experimental operational stage. Therefore, we consider this recommendation unresolved and will refer it to the PMB for resolution.

5. Ensure that appropriate legal instruments are used to acquire goods and services in accordance with law and agency policy

BOR response: The BOR did not concur with Recommendation 5, stating it has multiple controls and processes in place to ensure appropriate legal instruments are used for

financial assistance in accordance with law and agency policies. The BOR identified the Award Instrument Determination, the Office of the Solicitor review, and the Reclamation Financial Assistance Policy Branch review as its controls and processes and stated these actions were done for the subject agreement.

OIG reply: The BOR's explanation for its nonconcurrency does not address our recommendation because the BOR's controls and processes for legal instrument selection did not ensure the appropriate legal instrument was used. For instance, we found that the solicitor's review completed on October 21, 2015, almost 8 months before the cooperative agreement was awarded, was for an older draft statement of work that is vastly different from the statement of work included in the final agreement. For example, the draft statement of work is 5 pages while the final agreement's statement of work is 17 pages. In addition, the draft document's scope of work, milestones, and responsibilities are about two pages and are incomplete while the same sections of the final agreement are six pages. Further, the draft document states that the public purpose is to provide an increased opportunity for the public to evaluate innovative technologies, but the final agreement states that the public purpose is to treat drain water to significantly improve water quality for aquatic wildlife and water users.

Our Office of General Counsel also determined, and we agree, that the BOR should have used a procurement contract instead of a cooperative agreement to acquire staff services to operate and maintain the Demo-Plant because these services were intended to directly benefit the BOR in its efforts to meet its statutory mandate to provide drainage-related services. Therefore, we consider this recommendation unresolved and will refer it to the PMB for resolution.

6. Establish policy and procedures to ensure financial assistance agreements have statements of work that are clear, concise, and agreed upon

BOR response: The BOR did not concur with Recommendation 6, stating it has existing policies and procedures requiring financial assistance agreements to have detailed statements of work. BOR policy requires recipients to submit detailed statements of work for review and approval and to include sufficiently detailed activities funded, major tasks, and projected timelines.

OIG reply: The BOR's explanation for its nonconcurrency does not address our recommendation because BOR policy did not ensure the subject agreement's statement of work was sufficiently detailed. While BOR policy requires detailed statements of work, it does not provide procedures for preparing these documents or identify the information that should be included. As discussed in this report, we found that the agreement's statement of work did not clearly define work tasks and expected outcomes, making it difficult to determine whether tasks were complete and whether the Demo-Plant's performance was successful and within predetermined standards or metrics.

When we reviewed the cooperative agreement, we found that the budget was inconsistent with the statement of work's listed requirements. In addition, a BOR grants official told

us that the plant's performance under this agreement was difficult to monitor or evaluate because the Demo-Plant's planned accomplishment was not clearly defined in the cooperative agreement. Therefore, we consider this recommendation unresolved and will refer it to the PMB for resolution.

7. Review and improve the management and internal controls used to review cost invoices for financial assistance agreements

BOR response: The BOR did not concur with Recommendation 7, stating its policies and internal controls for payments to financial assistance recipients that were in place at the time of the subject agreement worked as designed. In addition, the BOR stated that Federal regulations and Department policy require recipients to maintain documentation for expenditures, but there is no requirement to review documentation for these expenditures unless there has been a compliance issue with a recipient that requires advance approval of individual payments. The BOR then stated that it cannot review cost invoices or require additional documentation for payments prior to a recipient being on agency review because that is contrary to regulation and policy. The BOR also stated that its financial assistance payments occur through an automated payment system and that it does not receive cost invoices unless the recipient has been placed on agency review.

OIG reply: The BOR's explanation for its nonconurrence does not address our recommendation because the BOR's policies and internal control practices for financial assistance payments did not ensure that it paid only for costs that were appropriate. As discussed in this report, our July 2018 cost audit identified questioned costs of almost 30 percent of \$772,974 in costs claimed by the Panoche District as of May 4, 2017, even after the BOR grants officer placed the district on agency review and began reviewing cost invoices. Our July 2018 cost audit report also identified the issue of the Panoche District's single audit reports being invalid, missing, and late (see Appendix 2); therefore, the BOR's assessment of the district's risk as low was inappropriate. In fact, according to the existing single audit reports, the district did not qualify as low risk, and thus should have been on agency review from the beginning of the agreement, along with the BOR establishing other internal control practices to ensure that it only paid for costs that were appropriate.

We disagree with the BOR's assertion that it cannot review cost invoices or require additional documentation for payments prior to a recipient being placed on agency review. We also disagree that the BOR cannot improve its review or improve the management and internal controls used to review cost invoices for financial assistance agreements.

In addition, our Office of General Counsel determined, and we agree, that nothing in the cited regulations prohibits the BOR from adopting our recommendation. Federal regulations cited by the BOR² do not prohibit agencies from reviewing cost invoices of recipients. We also note that subparts (c) and (e) under 2 C.F.R. § 200.210 allow for

² 2 C.F.R. §§ 200.207, 200.305(6), 200.338, and 200.415

additional terms and conditions to be included in financial assistance agreements associated with Federal awards.

In addition, the Department policy cited by the BOR in its response does not directly address cost reviews one way or the other. It states that recipients are to maintain appropriate accounting records and payments are approved or rejected automatically unless placed on agency review, which is a function that is only to be used to address recipient noncompliance or high risk. Further, the agency review function is not clearly defined in the departmental policy. The policy clearly states, however, that the bureau must ensure that recipients comply with the terms and conditions of award by conducting appropriate oversight and monitoring activities.

In addition, the cited BOR policy limits the review and approval of payments to recipients placed on agency review and requires grants officers to document the risks and rationale for using this payment control. Finally, the BOR policy cited in the response notes that the automated payment system has various types of payment control options, thus indicating it provides for some flexibility as to control options that can be employed. Therefore, we consider this recommendation unresolved and will refer it to the PMB for resolution.

Appendix I: Scope and Methodology

Scope

We evaluated the Bureau of Reclamation's (BOR's) management of the San Luis Demonstration Treatment Plant (Demo-Plant) in the San Luis Unit of the Central Valley Project, located in California. Our objective was to answer the following questions:

1. Did the Demo-Plant provide agricultural drainage services consistent with statutory mandate and as presented in San Luis Unit planning documents?
2. Did the Demo-Plant meet operational performance goals stated in the Design and Operating Criteria referenced in the cooperative agreement?
3. Did the BOR provide effective oversight of the cooperative agreement?

This evaluation addresses concerns initially identified during our audit of costs claimed by the Panoche Drainage District under Cooperative Agreement No. R16AC00087 with the BOR.

We performed our evaluation work for this report at the BOR's technical service center in Denver, CO, and at our office in Sacramento, CA, from January 2018 to June 2018. Our initial audit work for the cost audit was performed from May 2017 to November 2017.

Methodology

We conducted our evaluation in accordance with the Quality Standards for Inspection and Evaluation as put forth by the Council of the Inspectors General on Integrity and Efficiency. We believe that the work performed provides a reasonable basis for our conclusions and recommendations.

To meet our objective, we:

- Reviewed background information on the Demo-Plant, including court-related documents and environmental planning documents
- Reviewed Cooperative Agreement No. R16AC00087, including modifications and pre-award documents
- Reviewed the San Luis Act of 1960, the Code of Federal Regulations' uniform grant guidance (2 C.F.R. § 200), and U.S. Department of the Interior and BOR policies related to the administration of the cooperative agreement to operate the Demo-Plant
- Interviewed or contacted BOR officials
- Reviewed the BOR's cost data for the Demo-Plant

- Analyzed performance data for the Demo-Plant in comparison to design and operating criteria

We reviewed the BOR's internal control documentation and processes only as they related to the administration and oversight of the cooperative agreement done during our audit of the BOR's costs to operate and maintain the Demo-Plant (see Appendix 2 for prior audit coverage). We did not include a review of the BOR's information system controls as the primary objective of our review was to determine the Demo-Plant's purpose and performance and the BOR's management of the plant. We relied on a small amount of computer-processed data provided by the BOR, and our scope did not include verifying the source of the data.

Appendix 2: Prior Audit Coverage

Prior to this report, we issued two reports that identified significant concerns with the Bureau of Reclamation's (BOR's) management of the San Luis Demonstration Treatment Plant (Demo-Plant) in the San Luis Unit of the Central Valley Project, located in California.

Proposed Modification to USBR's Cooperative Agreement No. R16AC00087 With the Panoche Drainage District

Report No. 2017-WR-048-A

In November 2017, during our audit of the BOR's cooperative agreement with the Panoche Drainage District to operate and maintain the Demo-Plant, we learned that the BOR was considering the District's request for a reallocation of the cooperative agreement's budget to task areas for which we questioned costs. We also learned that the District may request a funding increase for this agreement. We expressed concerns regarding these requests and any decision by the BOR to distribute additional funding toward this agreement because we identified sizeable questioned costs and found the BOR's administration of the agreement to be deficient. We also questioned the need for such a reallocation or funding increase when more than \$3 million and 1 year remained on the agreement. We made three recommendations to increase the BOR's oversight of the cooperative agreement.

The Bureau of Reclamation's Cooperative Agreement No. R16AC00087 With the Panoche Drainage District

Report No. 2017-WR-048

In July 2018, during our audit of the BOR's cooperative agreement with the District to operate and maintain the Demo-Plant, we identified questioned costs amounting to \$213,891 of the \$772,974 audited. We also identified several significant internal control weaknesses that included invalid and missing single audits, unreliable financial records, lack of clearly written accounting policies and procedures, and questionable qualifications of certain District employees. We made 22 recommendations to help resolve the questioned costs and to ensure the District take certain actions to comply with State and Federal regulations.

Appendix 3: Bureau Response to Draft Report

The Bureau of Reclamation's response follows on page 24.



United States Department of the Interior
BUREAU OF RECLAMATION
Washington, DC 20240

IN REPLY REFER TO:
84-27410
4.4.13

VIA ELECTRONIC MAIL ONLY

Memorandum

To: Office of Inspector General
Attn: Assistant Inspector General for Audits, Inspections, and Evaluations

Through: Timothy R. Petty, Ph.D.
Acting For Assistant Secretary
for Water and Science

Kiel W... MAY 17 2019

From: Brenda Burman
Commissioner

Burman MAY 16 2019

Subject: The Bureau of Reclamation's Response to the Office of Inspector General (OIG)
The Bureau of Reclamation Did Not Effectively Manage the San Luis Demonstration
Treatment Plant, Report No. 2017-WR-048-B

The OIG, in its March 20, 2019, Draft Report – The Bureau of Reclamation Did Not Effectively Manage the San Luis Demonstration Treatment Plant, Report No. 2017-WR-048-B, requested that Reclamation inform the OIG of the planned course of action to address and implement the recommendations in the subject report. The requested information is attached.

If you have any questions or require additional information, please contact Ruth Welch, Acting Director, Mission Support Organization, at (303) 445-2783.

Attachment

cc: ASWS (KRae, TYonts)
91-00000 (RRogers), 92-00000 (SHagenauer, LWhite), 94-00000 (GPayne, AShepet)
94-30000 (OQuarles, RWolf), 96-00000 (MMAucieri, DPalumbo, JColeman)
84-27000 (SDeMarco), 84-27820 (HHirshman, ASkerl), 84-27400 HMMorrow, reading
file), 84-27410 (PClemens, DMatsunaga, BLOverdiek), 86-68190 (SIrvine)
MP-100 (AForsythe), MP-110 (DGray, TAblerle), MP-120 (Alubaswilliams),
MP-3600 (SMay), MP-3800 (BDavis)
SCCAO Fresno (JPapendick)
(w/att to each)

The Bureau of Reclamation's Response to the
Office of Inspector General (OIG) Draft Report
*The Bureau of Reclamation Did Not Effectively Manage
the San Luis Demonstration Treatment Plant*
Report No. 2017-WR-048-B

March 2019

The Audit outlines three objectives. Below are Reclamation's general comments related to these objectives and principle findings.

1. The first principal finding of the OIG report – *the Demo-Plant did not provide drainage service as required by statute* – is based on a misunderstood premise regarding the purpose of the Demo-Plant. As noted in multiple planning, construction, and operational documents; the purpose of the Demo-Plant is not to provide drainage service but rather to conduct testing of treatment technologies and collect data for the design and implementation of future drainage treatment facilities in the San Luis Unit (SLU). The Demo-Plant was included in the original Control Schedule submitted to the court in 2009 for implementation of drainage within the San Luis Unit and was not a component of the partial stay granted by the court from 2012-2018. Therefore, the United States continued reporting progress on the Demo-Plant to the court throughout the period of the stay.

Based on discussions with SLU contractors in 2015, Reclamation considered and reported a potential change to the purpose of the Demo-Plant that would convert it into a larger permanent drainage service facility with salt disposal capability after the facility operates efficiently and the associated costs were better understood. These discussions did not advance to a formal agreement and the proposed change has not been implemented. The purpose of the Demo-Plant remains unchanged as a demonstration facility for data collection.

2. The second principal finding is the Demo-Plant was not effectively managed because it did not consistently meet the operational performance goals. In reaching this conclusion, the OIG report misinterprets: (1) the purpose and function of the Demo-Plant; (2) the purpose and significance of treatment goals; and (3) the meaning of the performance data it reviewed.

Construction and operation of demonstration treatment plants prior to construction of permanent full-scale facilities is standard industry practice when there are significant uncertainties regarding performance and cost. The performance of a test facility is inherently uncertain and operates experimentally to achieve goals through equipment and process modifications along with adjustment and optimization of operating parameters. By contrast, a permanent commercial treatment plant is designed with established treatment systems and operates with fixed parameters to comply with strict regulatory standards. The data collected from the Demo-Plant provide a solid and consistent

technical basis upon which a future treatment plant can be designed to operate at 50% recovery.

For example, the data depicted in Figure 2 on page 9 of the OIG report shows an average reverse osmosis recovery of about 50%, which is the performance goal. The OIG report claims the minor variation in recovery ($\pm 1\%$) is evidence of inconsistent data caused by mismanagement. Instead of mismanagement, the variation is due to equipment and software programming limitations and is considered normal and acceptable. The OIG report also incorrectly recalculates the recovery as 34% by factoring in days when the reverse osmosis system was shut down. The performance cannot be measured or calculated when the system is shut down.

3. The third principal finding is Reclamation did not effectively oversee the cooperative agreement. Reclamation fundamentally disagrees with this conclusion and has in place internal controls and business processes related to recommendations 5, 6, and 7.

Reclamation demonstrated that multiple internal controls and processes were in place to ensure the appropriate legal instrument was used for financial assistance agreements, including an Award Instrument Determination (AID), regional peer review, solicitor review, and pre-award review by a bureau-wide policy analyst. For this agreement, an AID was completed, and higher-level review occurred, including solicitor review and pre-award policy review.

Policies and procedures existed which required a detailed statement of work (SOW), agreed upon through bilateral agreement between Reclamation and the recipient. Reclamation policy required that SOWs communicate activities funded under the agreement, including major tasks and projected timelines. For this agreement, the scope of work included three pages of details associated with five tasks, and a milestone for each task.

Reclamation policies existed governing review of payments to recipients, to the extent permitted by Federal regulation and DOI policy. Under regulation and policy, review of supporting documentation for payments is only permitted as a remedy for noncompliance. For this agreement, the recipient was placed on Agency Review when Reclamation became aware of noncompliance, which required additional documentation and Reclamation approval for each payment request.

Response to OIG Recommendations

Recommendation 1: Determine the cost and benefit of continued operation of the Demo-Plant.

Reclamation's Response: Concur. Reclamation collected cost data during the period of performance of the Cooperative Agreement (No. R16AC00087) and will now be able to use the data to produce a cost-benefit analysis.

Responsible Official: Mr. Ernest Conant, Mid-Pacific Regional Director

Target Implementation Date: May 31, 2021.

Recommendation 2: Establish specific goals or outcomes if the BOR determines that there is a benefit to continued operation of the Demo-Plant at the conclusion of the cooperative agreement.

Reclamation's Response: Concur. Reclamation established short-term performance criteria for transfer to operation and maintenance (O&M) status in the Project Management Plan Addendum, dated January 23, 2018. Reclamation will continue to perform testing and optimization to identify long-term performance goals after transfer to O&M status if Reclamation determines there is a benefit to continued operation of the Demo-Plant.

Responsible Official: Mr. Ernest Conant, Mid-Pacific Regional Director

Target Implementation Date: May 31, 2021.

Recommendation 3: Conduct additional planning work to determine current drainage needs, environmental impacts, and costs of the San Luis Unit for future drainage services activities.

Reclamation's Response: Non-concur. Reclamation developed an Environmental Impact Statement (2007) and signed a Record of Decision (2008). These documents will remain Reclamation's roadmap for providing drainage service to the SLU and provide a framework with flexibility to respond to changing needs for drainage. Reclamation continues to meet with SLU contractors to evaluate their drainage needs as new data becomes available. Current data will be used to size drainage features where appropriate, following the drainage plan Reclamation adopted in its 2008 Record of Decision. That drainage plan allows Reclamation to make adjustments to take account of new data on the number of drainage impaired lands.

Responsible Official: Mr. Ernest Conant, Mid-Pacific Regional Director

Target Implementation Date: N/A

Recommendation 4: Establish firm criteria for evaluating the Demo-Plant's future operational performance if the BOR continues Demo-Plant operation.

Reclamation's Response: Concur. As described in the response to Recommendation 2, Reclamation will identify specific long-term performance goals or outcomes if Reclamation determines there is a benefit to continued operation of the Demo-Plant.

Responsible Official: Mr. Ernest Conant, Mid-Pacific Regional Director

Target Implementation Date: May 31, 2021.

Recommendation 5: Ensure that appropriate legal instruments are used to acquire goods and services in accordance with law and agency policies.

Reclamation's Response: Non-concur. Reclamation has multiple controls and processes in place to ensure appropriate legal instruments are used for financial assistance in accordance with law and agency policies, including the Award Instrument Determination, Solicitor review, and Reclamation Financial Assistance Policy Branch review.

Reclamation Manual, Directives and Standards, ACM 01-01, requires use of an Award Instrument Determination (AID) document to verify financial assistance is the appropriate instrument for every agreement, and Reclamation has the authority to fund the proposed activities. For the subject agreement of this audit, the AID was completed and received multiple levels of review.

ACM 01-01 states legal review shall be obtained within 7 working days for all proposed financial assistance awards or modifications when review is advisable due to such issues as the complexity, novelty, intellectual property issues, potential conflicts of interest, questions on the applicability of a statutory authority, or other matters that may benefit from a solicitor's review. For the subject agreement of this audit, a solicitor review was conducted and approved on October 21, 2015, confirming the instrument and authority were appropriate.

Reclamation's Financial Assistance Policy Branch conducts pre-award reviews of all Reclamation financial assistance agreements above specified thresholds, or as requested by Reclamation financial assistance personnel; pre-award reviews include assessment of the appropriateness of the financial assistance instrument and its legal authority. Review thresholds are established annually and are communicated to Reclamation financial assistance personnel each fiscal year through a Reclamation Acquisition Circular (RAC). A pre-award review was conducted by Reclamation's Financial Assistance Policy Section and approved for the subject agreement on June 13, 2016, with no concerns as to instrument or authority.

Responsible Official: Ruth Welch, Acting Director, Mission Support Organization

Target Implementation Date: N/A

Recommendation 6: Establish policy and procedures to ensure financial assistance agreements have statements of work that are clear, concise, and agreed upon.

Reclamation's Response: Non-concur. Reclamation has existing policies and procedures which require financial assistance agreements to have detailed statements of work (SOW), which are agreed upon through bilateral signatures of the financial assistance agreement by a Reclamation Grants Officer and the recipient.

Reclamation Acquisition Circular (RAC) 16-08 was issued March 17, 2016, and requires recipients submit detailed SOWs for review, approval, and incorporation into

the final award or modification. SOWs should include sufficient detail to articulate clearly the activities funded under the agreement and must include a milestone plan identifying major tasks and projected timelines for completion. Grants Officers must incorporate the detailed SOW within the agreement and supporting documentation may be incorporated in the agreement directly or by reference. Previous to RAC 16-08, RAC 11-11 (issued May 2, 2011) provided the same policy regarding SOWs. . For this agreement, the scope of work included three pages of details associated with five tasks, and a milestone for each task.

Responsible Official: Ruth Welch, Acting Director, Mission Support Organization

Target Implementation Date: N/A

Recommendation 7: Review and improve the management and internal controls used to review cost invoices for financial assistance agreements.

Reclamation's Response: Non-Concur. Reclamation has policies governing payments to recipients of Reclamation financial assistance agreements. As described in the following paragraphs, policies and internal controls that were in place at the time of this agreement worked as designed. Federal regulation and DOI policy require recipients to maintain documentation of expenditures; a Federal awarding agency can require additional documentation as a remedy for noncompliance. When Reclamation became aware of noncompliance with agreement number R16AC00087, the Grants Officer placed the recipient on Agency Review, which required the recipient to provide Reclamation with supporting documentation for each payment. At that time, Reclamation also requested an OIG audit of the agreement (report number 2017-WR-048, issued July 12, 2018), during which OIG had the opportunity to review all the recipient's expenditures for the agreement.

Payment Regulations, Policies, and Systems used by Reclamation

Reclamation cannot review "cost invoices" or require additional documentation for payments prior to a recipient being placed on Agency Review, as that is contrary to Federal regulation and Department of the Interior policy. Under Federal regulation, there is no requirement for a Federal awarding agency to review specific expenses that are reimbursed, unless there has been a compliance issue identified with a recipient that requires advance approval of individual payments. 2 CFR 200.415 states that accuracy of expenditures is the responsibility of the recipient, which is responsible for certifying that expenditures, disbursements, and cash receipts are accurate and used for the purposes of the award. 2 CFR 200.305(6) states that unless otherwise required by Federal statutes, payments for allowable costs by non-Federal entities must not be withheld unless there is noncompliance as outlined in 2 CFR 200.338 and 2 CFR 200.207, which allow a Federal agency to request additional documentation as a remedy for noncompliance.

Reclamation's financial assistance recipient payments occur through the U.S. Treasury's Automated Standard Application for Payments (ASAP) system for grant and cooperative

agreement payments. Reclamation does not receive “cost invoices” or supporting documentation for financial assistance payments unless the recipient has been determined to be noncompliant (as discussed in the next paragraph). Reclamation Acquisition Circular (RAC) 13-10 was issued July 11, 2013 and sets forth requirements stated in Department of Interior Guidance (DIG) Release 2013-03, dated April 3, 2013. DIG 2013-03 does not require a recipient to provide supporting documentation for payment requests; DIG section 4 “Recipient Responsibilities” part C requires the recipient to maintain appropriate accounting records. RAC 13-10 states “unless an account is placed on “Agency Review/Maximum Draw Limit,” recipients can request and receive drawdowns (payments) as needed without any additional approvals or any dollar limitations.” RAC 13-10 also provides guidance for review of periodic payment activity reports and financial reports by personnel as a monitoring control.

Reclamation Agency Review Policy and Procedures

As noted above, Reclamation Acquisition Circular (RAC) 13-10 sets forth requirements stated in Department of Interior Guidance (DIG) Release 2013-03. DIG 2013-03 section 4 “Procedures” part B “Step 2 – Payment Request Process” subpart b states Agency Review is “only ... used if deemed appropriate to address recipient noncompliance or if the recipient is designated as high-risk.” Reclamation policy (RAC 13-10 and RAC 16-08, issued March 17, 2016) states that supporting documentation can be required as a remedy for noncompliance. RAC 13-10 states the steps to follow for determining that a recipient be placed on Agency Review, placing the recipient on Agency Review, monitoring the recipient, and removing the recipient from Agency Review. For the subject agreement of this audit, the recipient was placed on Agency Review on March 31, 2017, after the Grants Officer became aware that noncompliance had occurred; after that date, additional documentation was required for each payment request.

The OIG report stated that for the subject agreement, the [REDACTED] relied on the Technical Representative to review and approve payments for the recipient of the subject agreement, and the OIG report also stated that Reclamation policy states that [REDACTED] [REDACTED] have primary responsibility for the financial aspects of cooperative agreements. While that statement is generally accurate, RAC 13-10 states that the [REDACTED] should ensure the payment request is reviewed by the Technical Representative.

Responsible Official: Ruth Welch, Acting Director, Mission Support Organization

Target Implementation Date: N/A

Appendix 4: Status of Recommendations

Recommendation	Status	Action Required
Recommendation 1	Resolved but not implemented	We will refer this recommendation to the Assistant Secretary for Policy, Management and Budget to track implementation.
Recommendations 2 – 7	Unresolved	We will refer these recommendations to the Assistant Secretary for Policy, Management and Budget for resolution.

Report Fraud, Waste, and Mismanagement



Fraud, waste, and mismanagement in Government concern everyone: Office of Inspector General staff, departmental employees, and the general public. We actively solicit allegations of any inefficient and wasteful practices, fraud, and mismanagement related to departmental or Insular Area programs and operations. You can report allegations to us in several ways.



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