



# Completion Report

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Project Number: 44031-013  
Loan Numbers: 2691, 2692  
February 2017

## Palau: Water Sector Improvement Program

This document is being disclosed to the public in accordance with ADB's Public Communications Policy 2011.

Asian Development Bank



## CURRENCY EQUIVALENTS

The currency of the Republic of Palau is the United States dollar

## ABBREVIATIONS

ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
BPW	–	Bureau of Public Works
DMF	–	design and monitoring framework
EO	–	executive order
GDP	–	gross domestic product
LIBOR	–	London interbank offered rate
MTDS	–	medium-term development strategy
MOF	–	Ministry of Finance
MPIIC	–	Ministry of Public Infrastructure, Industry and Commerce
OCR	–	ordinary capital resources
OEK	–	Olibiil Era Kelulau (bicameral Congress)
PIU	–	program implementation unit
PSC	–	program steering committee
PPUC	–	Palau Public Utilities Corporation
PPTA	–	project preparatory technical assistance
PWSC	–	Palau Water and Sewer Corporation
SDR	–	special drawing rights
WWO	–	Water and Wastewater Operations Division of PPUC

## NOTES

- (i) The fiscal year (FY) of the Government of Palau ends on 30 September. “FY” before a calendar year denotes the year in which the fiscal year ends, e.g., FY2010 ends on 30 September 2010.
- (ii) In this report, "\$" refers to US dollars.

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**BASIC DATA  
(Loan 2691)**

**A. Loan Identification**

1.	Country	Republic of Palau
2.	Loan Number	2691-PAL
3.	Program Title	Water Sector Improvement Program
4.	Borrower	Republic of Palau
5.	Executing Agency	Ministry of Finance
6.	Amount of Loan	\$12,600,000
7.	Program Completion Report Number	1606

**B. Loan Data**

1.	Fact-Finding (Appraisal was waived)	
	– Date Started	26 July 2010
	– Date Completed	06 August 2010
2.	Loan Negotiations	
	– Date Started	23 September 2010
	– Date Completed	23 September 2010
3.	Date of Board Approval	09 November 2010
4.	Date of Loan Agreement	06 October 2011
5.	Date of Loan Effectiveness	
	– In Loan Agreement	04 January 2012
	– Actual	05 December 2011
	– Number of Extensions	0
6.	Closing Date	
	– In Loan Agreement	28 February 2015
	– Actual	02 April 2014
	– Number of Extensions	0
7.	Terms of Loan	
	– Interest Rate	LIBOR
	– Maturity (years)	15
	– Grace Period (years)	3

8. Disbursements

a. Dates

Initial Disbursement	Final Disbursement	Time Interval
14 December 2011	21 November 2013	23.30 months
Effective Date	Original Closing Date	Time Interval
05 December 2011	28 February 2015	38.9 months

b. Amount (\$ million)

<b>Category or Subloan</b>	<b>Original Allocation</b>	<b>Last Revised Allocation</b>	<b>Amount Disbursed</b>	<b>Undisbursed Balance</b>
Program	12.60	12.60	12.60	0.00
<b>Total</b>	<b>12.60</b>	<b>12.60</b>	<b>12.60</b>	<b>0.00</b>

9. Local Costs (Financed)

-	Amount (\$ million)	0.00
-	Percent of Local Cost	0.00
-	Percent of Total Cost	0.00

**C. Program Data**

1. Program Cost (\$ million)

<b>Cost</b>	<b>Appraisal Estimate</b>	<b>Actual</b>
Foreign Exchange Cost	17.20	17.77
Local Currency Cost	0.00	0.00
<b>Total</b>	<b>17.20</b>	<b>17.77</b>

2. Financing Plan (\$ million)

<b>Cost</b>	<b>Appraisal Estimate</b>	<b>Actual</b>
Implementation Costs		
Borrower Financed	1.20	1.70
ADB Financed - (OCR)	12.60	12.60
ADB Financed - (ADF)	3.40	3.47
Other External Financing	0.00	0.00
<b>Total</b>	<b>17.20</b>	<b>17.77</b>
IDC Costs		
Borrower Financed	0.00	0.00
ADB Financed	0.00	0.00
Other External Financing	0.00	0.00
<b>Total</b>	<b>17.20</b>	<b>17.77</b>

ADB = Asian Development Bank, ADF = Asian Development Fund, IDC = interest during construction, OCR = ordinary capital resources.

3. Cost Breakdown by Program Component (\$ million)

<b>Component</b>	<b>Appraisal Estimate</b>	<b>Actual</b>
Foreign Cost	17.20	17.77
<b>Total</b>	<b>17.20</b>	<b>17.77</b>



## 4. Program Schedule

Item	Appraisal Estimate	Actual
<b>Other Milestones</b>		
Tranche Release		
First Tranche (\$6.40 m OCR and \$3.40 m ADF)	December 2010	14 December 2011
Second Tranche (\$6.20 m OCR)	July 2012	21 November 2013

ADF = Asian Development Fund, OCR = ordinary capital resources

## 5. Program Performance Report Ratings

Implementation Period	Ratings	
	Development Objectives	Implementation Progress
	Not applicable	Not applicable

## D. Data on Asian Development Bank Missions

Name of Mission	Date	No. of Persons	No. of Person-Days	Specialization of Members <sup>a</sup>
Fact-finding	26 Jul–6 Aug 2010	6	72	a, b, c, d, e, f
Country Programming Mission <sup>b</sup>	25-27 Jan 2012	1	3	a
Midterm review	13–17 Aug 2012	2	10	a, d
Country Consultation Mission <sup>b</sup>	19–26 Feb 2013	3	24	i, j, k
Country Partnership Consultation Mission <sup>b</sup>	23–26 April 2013	4	16	g, h, i, j
Program completion review <sup>c</sup>	23-30 Aug 2016	1	8	k

<sup>a</sup> a = country specialist, b = financial specialist, c = procurement specialist, d = counsel, e = economics consultant, f = finance consultant, g = director general, h = director, i = urban development specialist, j = ADB development coordination officer, k = staff consultant.

<sup>b</sup> These missions covered several topics including the Program. It is not possible, however, to determine how many person-days were allocated to discussing the Program.

<sup>c</sup> The program completion review mission comprised a transport / energy / infrastructure economist (staff consultant).

## BASIC DATA (Loan 2692)

### A. Loan Identification

1.	Country	Republic of Palau
2.	Grant Number	2692-PAL
3.	Program Title	Water Sector Improvement Program
4.	Borrower	Republic of Palau
5.	Executing Agency	Ministry of Finance
6.	Amount of Loan	SDR2.23 million (\$3.4 million equivalent)
7.	Program Completion Report Number	1606

### B. Loan Data

1.	Fact-Finding (Appraisal was waived)	
	– Date Started	26 July 2010
	– Date Completed	06 August 2010
2.	Loan Negotiations	
	– Date Started	23 September 2010
	– Date Completed	23 September 2010
3.	Date of Board Approval	09 November 2010
4.	Date of Loan Agreement	06 October 2011
5.	Date of Loan Effectiveness	
	– In Loan Agreement	04 January 2012
	– Actual	05 December 2011
	– Number of Extensions	0
6.	Closing Date	
	– In Loan Agreement	28 February 2015
	– Actual	02 April 2014
	– Number of Extensions	0
7.	Terms of Loan	
	– Interest Rate	1% per annum during the grace period and 1.5% per annum thereafter
	– Maturity (number of years)	24
	– Grace Period (number of years)	8
8 .	Disbursements	
a.	Dates	

Initial Disbursement	Final Disbursement	Time Interval
14 December 2011	14 December 2011	None
Effective Date	Original Closing Date	Time Interval
05 December 2011	28 February 2015	38 months

## b. Amount (SDR million)

Category	Original Allocation	Last Revised Allocation	Amount Disbursed	Undisbursed Balance
Program	2.23	2.23	2.23	0.00
<b>Total</b>	<b>2.23</b>	<b>2.23</b>	<b>2.23</b>	<b>0.00</b>

Amount (\$ million)

Category	Original Allocation	Last Revised Allocation	Amount Disbursed	Undisbursed Balance
Program	3.40	3.47	3.47	0.00
<b>Total</b>	<b>3.40</b>	<b>3.47</b>	<b>3.47</b>	<b>0.00</b>

The difference between the original allocation and the revised allocation was due to the exchange rate variation between the special drawing rights (SDR) and the US dollar

## 9. Local Costs (Financed)

-	Amount (\$ million)	0.00
-	Percent of Local Cost	0.00
-	Percent of Total Cost	0.00

## C. Program Data

## 1. Program Cost (\$ million)

Cost	Appraisal Estimate	Actual
Foreign Exchange Cost	17.20	17.77
Local Currency Cost	0.00	0.00
<b>Total</b>	<b>17.20</b>	<b>17.77</b>

## 2. Financing Plan (\$ million)

Cost	Appraisal Estimate	Actual
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## 3. Cost Breakdown by Program Component (\$ million)

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Foreign Cost	17.20	17.77
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## 4. Program Schedule

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## 5. Program Performance Report Ratings

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<sup>b</sup> These missions covered several topics including the Program. It is not possible, however, to determine how many person-days were allocated to discussing the Program.

<sup>c</sup> The program completion review mission comprised a transport / energy / infrastructure economist (staff consultant).

## I. PROGRAM DESCRIPTION

1. Palau's water and sanitation sector has been characterized by (i) an inadequate legal and regulatory framework; (ii) low water tariffs and high water consumption; (iii) fragmented management and service delivery responsibilities;<sup>1</sup> (iv) inefficient operations and management; and (v) a projected water shortage resulting from excessive demand growth and high system losses. The Government of the Republic of Palau (the government) asked the Asian Development Bank (ADB) on 15 October 2009 for support to improve policy, legislation, regulation and institutional development that would enable an affordable and sustainable water and sewerage service. The Water Sector Improvement Program (referred to as the program)<sup>2</sup> was subsequently discussed and agreed during a reconnaissance mission by ADB in May 2010.

2. The program supported the government's policy reform, including divesting itself of responsibility for delivery of water and sewerage services and moving to a user-pays system for these services. By divesting responsibility for the provision of services, the government would also enhance its role in managing water-sector policy and further capital investment in the sector by a state-owned enterprise.

3. The program was to focus on key areas that were the most critical for reform, and could serve as a foundation for future reforms, including (i) strengthening the policy and legislative arrangements within the sector; (ii) establishing an independent authority to deliver water and sewerage services on a full cost-recovery basis that would reduce the burden on the government's budget; (iii) improve the efficiency of operations within the water and sewerage systems; and (iv) educate the people of Palau on the benefits of reticulated water in order to reduce the high water-production cost. The impact of the program would be sustainable water and sewerage services. The outcome would be that the demand for water and sewerage services would be met. At appraisal, the program had the following four outputs: (i) legal and policy frameworks for water sector improvements; (ii) an independent and autonomous public corporation that delivered improved water and sewerage services; (iii) full cost recovery in the water and sanitation sector; and (iv) effective consultation on water and sanitation sector issues. Appendix 1 compares the program design and monitoring framework (DMF) at appraisal with the program's achievements. Actions to deliver the program outputs are provided in the policy matrix, Appendix 2.

## II. EVALUATION OF DESIGN AND IMPLEMENTATION

### A. Relevance of Design and Formulation

4. The proposed program was consistent with the government's Medium-Term Development Strategy (MTDS) 2009–2014<sup>3</sup>, which was developed to support implementation of the National Master Development Plan<sup>4</sup> and ADB's Country Partnership Strategy, 2009–2013.<sup>5</sup> ADB's country partnership strategy supports the goals and actions of the government's MTDS

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<sup>1</sup> The Bureau of Public Works (BPW) within the Ministry of Public Infrastructure, Industry and Commerce (MPIIC) was responsible for the operation of the water and sewerage networks; the Ministry of Finance was responsible for billing and payment of water charges; and the capital infrastructure unit of MPIIC was responsible for planning and implementing water supply and sewerage capital works programs.

<sup>2</sup> ADB. 2010. *Report and Recommendation of the President to the Republic of Palau for the Water Sector Improvement Program*. Manila.

<sup>3</sup> Government of Palau. 2009. *Medium-Term Development Strategy: A Plan for Action*. Koror.

<sup>4</sup> Government of Palau. 1996. *National Master Development Plan*. Koror

<sup>5</sup> ADB. 2009. *Country Partnership Strategy: Palau, 2009–2013*. Manila.

and includes technical and financial support for sewerage sector planning, improving water resource management, and water and sanitation sector infrastructure development.

5. The goals of the MTDS were (i) investing in the water and sanitation sector; (ii) moving state-owned enterprises toward full cost recovery; and (iii) reducing government expenditure by eliminating subsidies. ADB supported the development of the MTDS through technical assistance (TA) for the Facility for Economic and Infrastructure Management, and supported improved public water supply services through the TA for Preparing the Babeldaob Water Supply Project, from which the program evolved.<sup>6</sup> ADB also approved the TA for the Sanitation Sector Development to develop a national wastewater policy and prepare sewerage master plans for Koror and Airai.<sup>7</sup>

6. In 2010, the government began a program to reform Palau's water and sanitation sector in order to address issues before they hindered tourism, the country's major economic driver. The water and sanitation sector reforms supported Palau's MTDS. The program loan preparation was based on a letter of request from the Vice President of the Republic of Palau on 15 October 2009. The letter requested ADB's support with the government's fiscal stress following the global economic crisis and consequent reduction in domestic revenue. The preparation of the proposed program was subsequently discussed and agreed during an ADB reconnaissance mission in May 2010. The program supported the MTDS' goals and actions by (i) investing in the water and sanitation sector; (ii) moving state-owned enterprises toward full cost recovery; and (iii) reducing government expenditure by eliminating subsidies. The program also applied lessons from earlier ADB policy programs in the Pacific, as well as ADB's approach to engaging with weakly performing countries, notably by (i) adopting a country-led set of policy actions developed in an open, participatory manner and at a pace in keeping with country practices; and (ii) initiating a long-term policy dialogue and providing TA support.<sup>8</sup> The program loan was the government's first ADB loan since becoming a member country of ADB in 2003. The design and formulation of the program was highly relevant at appraisal and remained so at project completion.

## **B. Program Outputs**

7. At appraisal, the program had four outputs: (i) legal and policy frameworks for water sector improvements; (ii) an independent and autonomous public corporation that delivers improved water and sewerage services; (iii) full cost recovery in the water and sanitation sector; and (iv) effective consultation on water and sanitation issues.

### **1. Output 1: A Legal and Policy Framework for Water Sector Improvement is in Place**

8. At appraisal, the policy and legal framework to enable the provision of sustainable and efficient water and sewerage services by an independent, government corporate entity, Palau Water and Sewer Corporation (PWSC), was to be established.

<sup>6</sup> ADB. 2007. *Technical Assistance to the Republic of Palau for the Facility for Economic and Infrastructure Management*. Manila (TA 4929-PAL); ADB. 2007. *Technical Assistance to the Republic of Palau for Preparing the Babeldaob Water Supply Project*. Manila (TA 4977-PAL).

<sup>7</sup> ADB. 2009. *Technical Assistance to the Republic of Palau for Sanitation Sector Development*. Manila (TA 7382-PAL).

<sup>8</sup> ADB. 2009. *ADB Support for Public Sector Reforms in the Pacific: Enhance Results through Ownership, Capacity, and Continuity*. Manila. ADB's approach to fragile situations is outlined in ADB. 2007. *Achieving Development Effectiveness in Weakly Performing Countries*. Manila

9. The output of a legal and regulatory framework to create an independent and autonomous water and sewerage authority operating on commercial principles and targeting full cost recovery by the end of FY2015 was established. The output was to be in place by December 2010, but was not completed until December 2011, thus delaying the release of the first tranche. The first tranche was disbursed on 14 December 2011 following confirmation of the government's compliance with the first-tranche conditions. The delay in the program implementation timetable was the result of a 13-month delay from Board approval to loan effectiveness. The cause of the delay was a 12-month delay by Congress in signing into law an Act creating the PWSC and an Act authorizing the President of Palau to sign the loan agreements. Following the adoption of the Water and Sewer Corporation Act of 2010, the PWSC was established in September 2011 and started operating in August 2012.

10. In June 2013, the PWSC and the Palau Public Utilities Corporation (PPUC), Palau's electricity utility, were consolidated to form an independent and autonomous electricity, water, and sewerage corporation to improve cost efficiencies in the delivery of such services (para 31 refers). Due to the merger of the PWSC and the PPUC and certain policy actions not being in place, the second tranche was not released until November 2013 (at appraisal, the estimate was it would be released by July 2012).<sup>9</sup> The Water and Wastewater Operations division (WWO)<sup>10</sup> was established within the PPUC to deliver water and sanitation services. The President endorsed the Water Policy on 17 April 2012.<sup>11</sup>

11. The regulations to implement fees and charges for water and wastewater services issued on 6 December 2010 detail the water charges applicable for 2011 and 2012. Water supply charges increased on 1 February 2012 in accordance with the regulations for 2012 and reflect the water charge increases scheduled in the loan agreements. Water charges have continued to increase on a yearly basis in line with the loan agreements under the conditions for release of the first and second tranche.

12. The Utilities Consolidation Act contains provisions for water tariffs for Palau's outlying states. The introduction of separate water tariffs for Koror and Airai—the main islands where 80% of the population reside—and the outlying states was intended to account for the inferior service provided by the water supply systems in these states. In June 2013, the water tariffs for the outlying states were reduced as scheduled under the regulations to implement fees and charges for water and wastewater services for 2011. These tariffs still remain at the 2011 rates for the outlying states. The PPUC marginally increased water tariffs for water services in Koror and Airai in October 2013 to offset the reduction in revenue resulting from the lower tariffs for the outlying states. The water tariffs for the outlying states were reassessed in 2015 on the basis of the quality of water services and the principle of full cost recovery. Out of the 14 outlying states, five are metered and nine are not. The nine non-metered states still pay the fixed flat fee.

<sup>9</sup> An ADB country consultation mission from 23 April to 26 April 2013 agreed target dates with the government for the completion of the policy actions required to release the second tranche. For those policy actions not completed, i.e. policy action A.2, B.2, B.3 to B.6, and C.2 (as shown in Appendix 2 Policy Matrix), the target date was 31 May 2013. This target date was not met, as shown in Appendix 2, and the release of the tranche was delayed.

<sup>10</sup> The WWO was declared operationally effective through Executive Order No. 343 signed by the President on 23 July 2013.

<sup>11</sup> The policy presents the background, vision, scope, goals, principles, issues and threats, elements, and responsibilities for implementing organizations and partner organizations and is in a form and substance that was acceptable to ADB.

13. On 1 February 2012, the domestic volumetric charge was increased by 5% from \$0.30 per 1,000 gallons of metered water consumed to \$0.315 per 1,000 gallons of metered water consumed. On the same date, the nondomestic volumetric charge was increased by 30% from \$1.70 to \$2.21 per 1,000 gallons of metered water consumed. Volumetric charges have continued to increase on a yearly basis in line with loan conditions for release of the first and second tranche.

## **2. Output 2: An Independent Palau Water and Sewer Corporation Delivers Improved Services**

14. At appraisal, it was envisaged that the PWSC would start delivering water and sewerage services 18 months after the approval of the PWSC Act, which was expected by 30 September 2010. During the 18-month transition period, the following was to be undertaken: (i) preparation of an organizational structure for the PWSC; (ii) transfer of water and sewerage assets from the government to the PWSC; (iii) development of an asset-management plan covering planned investments and operations and maintenance; (iv) transfer of staff through the reduction in force provision of the Public Administration Act; (v) agreement on staff conditions of service and human-resource management plan; (vi) adoption of financial management arrangements and systems; (vii) development of new billing and collection systems; (viii) development of guidelines and technical standards; and (ix) development of an institutional development plan.

15. As noted previously (para 9 refers), the PWSC was established in September 2011 and started operations in August 2012. Presidential Executive Order (EO) No. 324 was issued on 30 January 2013, instructing the PWSC to cease all incorporation activities. The government asked ADB to visit Palau to discuss the relative merits of a merger. ADB reviewed the proposed merger and subsequently recommended against the merger in the short term. However, the PWSC and the PPUC merged on 6 June 2013 (para 31-32 refer).

16. Initially, the Bureau of Public Works (BPW) water and sewerage personnel and assets were transferred to the PWSC through EO No. 332 signed on 19 April 2013. The personnel and assets were moved to the PPUC on 6 June 2013 upon the promulgation of the Utilities Consolidation Act, following the merger. Following the merger of the PWSC and the PPUC, the financial management, billing, and collection systems developed by the PWSC were integrated into the PPUC's financial management, billing, and collection system. The PPUC Board adopted and implemented a user-pays policy for water and sewerage services. The policy mandates (i) the identification and immediate disconnection of illegal connections; (ii) semiannual auditing of the WWO customer database supported by the PPUC leak-detection program; and (iii) universal metering of all customers and application of volumetrically based water and sewerage services by mid-2014. The policy also enables the PPUC to disconnect or limit the supply of water to customers with billing arrears greater than 60 days. The PPUC Board also adopted water and sewerage performance benchmarks for five corporate objectives: (i) full cost recovery for water and sewerage operations by the end of FY2015; (ii) water operational improvement through (a) the reduction of nonrevenue water to less than 25% by FY2015; (b) improvement in the continuity of the water supply to 99.9% by FY2014; and (c) reduction of household water consumption by 30% by FY2015; (iii) 20% reduction in the number of uncontrolled sewage overflows by FY2015; (iv) increase in bill collections to 95% by FY2015 (achieved); and (v) development and implementation of a community-awareness plan for water conservation and a health-awareness support plan by December 2012 (achieved). All these benchmarks aligned with the targets of the DMF (Appendix 1).



### 3. Output 3: Full Cost Recovery is Achieved in the Water and Sewerage Sector

17. At appraisal, the program supported: (i) a progressive increase in tariffs to full cost recovery; and (ii) budget support to cover the difference between tariff revenue and actual costs during the transition. The first tariff increase was approved as part of the FY2011 Budget Act. The second increase was regulated by the Minister of Finance in late 2011 and became effective in February 2012. Subsequent tariff increases, to achieve full cost recovery, have been enacted in subsequent years. At appraisal, it was envisaged that full cost recovery would be achieved by FY2015 with no government budget support. Due to the merger between the PWSC and the PPUC, there was a change in how cost recovery was to take place.<sup>12</sup>

18. The law stated that the rates set by the PWSC for the water and wastewater operations were to remain in effect and were to be the rates of the PPUC in Koror and Airai states. Water rates for all the other outlying states (a total of 14) were to be those of 2011 until such time as the PPUC saw it appropriate for a subsection of the law-enabled future rates to be assessed on the basis of quality and volume of water used. Wastewater rates were to be assessed on the basis of usage. Future rates were to be designed on the basis of achieving full cost recovery, meeting the PPUC's operational costs, and recovering the cost of capital of the PPUC. The 2011 rates are still in use today for the outlying states due to the poor quality of the water in these states. In FY2017, these rates are a flat fee of \$12 for water and \$1.50 for wastewater.

19. In effect, the PPUC is providing services at subsidized rates for these outlying states but is not violating its primary objective of operating efficiently and sustainably. The government is paying a subsidy to the PPUC for these services, i.e., a community service obligation, due to its providing water at a price below the actual cost of its delivery. Koror and Airai water and wastewater services are paid for by tariffs that are regularly increased. These two states are covering their costs with the revenues they obtain. It was envisaged at appraisal that the tariff for nonresidential water would be \$3.36/1,000 gallons by FY2015, while the actual tariff was \$4.51/1,000 gallons. The tariff for FY2017 is \$6.49/1,000 gallons for 5,000 gallons or more for Koror and Airai states. Similarly, the tariff for nonresidential sewer at appraisal was envisaged to be \$3.73/1,000 gallons by FY2015, and was actually \$4.13/1,000 gallons. In FY2017, the tariff is \$5.94/1,000 gallons for 5,000 gallons or more in Koror and Airai states. For consumption up to 5,000 gallons, residential water tariffs were to be increased from \$0.85/1,000 to \$1.30/1,000 gallons. The actual tariff in FY2015 was \$1.47/1,000 gallons in Koror and Airai states. Sewerage tariffs were also to be charged to residential customers commencing at \$0.30/1,000 gallons up to 5,000 gallons, and the actual tariff in FY2015 was \$0.36/1,000 gallons in Koror and Airai states.

20. A financing agreement between the Ministry of Finance (MOF) and the PPUC for a grant of \$2.6 million and a loan of up to \$6.2 million was executed on 12 September 2013. The grant and loan funds were to improve the PPUC's water and sewerage technical and management capability, and to provide budget support to meet the shortfall between revenue and costs for operations, maintenance, debt servicing, and depreciation.

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<sup>12</sup> Initially House Bill No. 9-4-1 was submitted on 24 January 2013 and the final action in the House was 23 May 2013. The Bill then went to Senate and was passed on 23 May 2013. The President signed it on 6 June 2013 and this was then entered into law as Republic of Palau Public Law (RPPL) No. 9-4. During the process of the finalization of RPPL No. 9-4, there was correspondence between the Director, Urban, Social Development and Management Division of Pacific Regional Department and the Minister of Finance covering comments that ADB had on the House Bill 9-4-1

#### 4. Output 4: An Effective Public Consultation is in Place

21. At appraisal, the government was to undertake a public advocacy program with politicians, civil society, and community groups on the policy, its importance to Palau's future, and the impact on the people. The government was to seek support on the creation of the PWSC, and for tariff reform. The PWSC was to conduct an awareness campaign on the importance of water conservation and behavior change to help the community adapt to the new policy arrangements and minimize their impact. The awareness campaign was to include support for sanitation, hygiene, water use, and health awareness.

22. The output on effective public consultation was estimated, at appraisal, to be done by December 2012. The Minister of Finance signed a communal consultation plan on 1 October 2010. Awareness plans for water and health were in place on 28 September 2012. Public hearings are held yearly on water and sewerage tariffs, and radio talk shows take place to discuss various topics on water conservation, tariffs, etc. Brochures are also distributed on water conservation measures. The most recent public hearing was from 15 August to 19 August 2016, discussing water and wastewater tariffs for FY2017.

#### C. Program Costs

23. At appraisal, the program cost was estimated to be \$17.2 million equivalent. This comprised a loan of \$12.6 million from ADB's ordinary capital resources (OCR) and a loan of SDR2.23 million (\$3.4 million equivalent) from ADB's Special Funds resources (Asian Development Fund [ADF] loan). The government was to contribute \$1.2 million equivalent through in-kind and cash contributions.

24. The size of the program was determined after consideration of (i) the projected financing requirements for the sector over the implementation period at about \$16 million; (ii) the lack of available cofinancing resources; (iii) the direct costs of supporting tariff reform; (iv) adjustment costs in restructuring the sector, including reticulation network refurbishment, improving sector commercial capacity, and capacity development programs; and (v) the significance and sensitivity of the policy actions.

25. The actual program completion cost was \$17.77 million equivalent, with ADB loans totaling \$16.07 million equivalent (the increase from \$16 million equivalent at appraisal to an actual \$16.07 million equivalent is due to the exchange rate variation between the SDR and the US\$). The government contribution was \$1.70 million.

#### D. Disbursements

26. The proceeds of the loan were to be disbursed to the government according to ADB's Simplified Disbursement Procedures and Related Requirements for Program Loans.<sup>13</sup> The loan proceeds were disbursed in accordance with ADB's *Loan Disbursement Handbook* (as amended from time to time) and detailed arrangements agreed upon between the government and ADB. The loans were released in two tranches to meet the expected associated costs of policy reforms. The first of the two tranches in the amount of \$9,872,734.40 (\$6,400,000 from Loan No. 2691-PAL and SDR2,230,000 [\$3,472,734.40 equivalent] from Loan No. 2692(SF)-PAL) was released on 14 December 2011. The second tranche was disbursed on 21 November 2013. The disbursement of the two tranches was delayed from what was envisaged at appraisal

<sup>13</sup> ADB. 1998. *Simplified Disbursement Procedures and Related Requirements for Program Loans*. Manila

(paras 29 and 30 refer). The proceeds financed the full foreign exchange costs, excluding local taxes and duties, of items produced and procured in ADB member countries and excluded items on the list of ineligible items and imports financed by other bilateral and multilateral sources. No supporting import documentation was required if, during each year that loan proceeds were expected to be disbursed, the value of Palau's total imports minus imports from nonmember countries, ineligible imports, and disbursements made under other official development assistance was greater than the amount of the loan expected to be disbursed during such year. The loans were disbursed more slowly than envisaged at appraisal because of program delays. There were no undisbursed balances from either the OCR or the ADF loans and the loans were closed on 2 April 2014.

## **E. Program Schedule**

27. In November 2010, ADB approved two loans totaling \$16.0 million equivalent to Palau for the program, comprising \$12.60 million from OCR and SDR2.23 million (\$3.4 million equivalent) from ADF resources. The loan agreements were signed on 6 October 2011 and declared effective on 5 December 2011. The loans were to be disbursed in two tranches: the first tranche of \$6.40 million from ordinary capital resources and SDR2.23 million from Special Funds resources, and the second of \$6.20 million from ordinary capital resources.

28. The first tranche was disbursed on 14 December 2011 following confirmation of the government's compliance with the first-tranche conditions. The delay in the program implementation timetable was the result of a 13-month delay from Board approval to loan effectiveness. The cause of this was a 12-month delay by Congress in signing into law an Act creating the PWSC and the Act authorizing the President of Palau to sign the loan agreements.

29. Approximately one-third of the second tranche policy actions had been completed by August 2012<sup>14</sup>, but, as a consequence of the initial delay in loan effectiveness, the program was still delayed by 12 months. The delay in the release of the second tranche reflected significant changes to the Palau government and related disruptions. This included parliamentary elections that brought a new government into power. The government personnel changes accompanying the new government disrupted the reform agenda and engagement with development partners, including ADB.

30. On 24 January 2013, the President of Palau submitted a draft bill to the House of Delegates to merge the PPUC and the PWSC. Presidential EO No. 324 was subsequently issued on 30 January 2013. The Bill: (i) repealed EO No. 282, which had established the Water Sector Steering Committee, and EO No. 303, which had appointed the PWSC as the implementing agency (thereby making the PWSC effective specifically for the purpose of implementing the policy actions agreed for the Program), and instructing the PWSC to temporarily cease all incorporation and start-up activities; and (ii) established a Water and Sewer Task Force mandated to: (a) perform the duties of the Water and Sewer Steering Committee; (b) prepare a report for consideration by the President, the Senate and the House of Delegates by 1 March 2013 addressing (i) the current state of water supply and sewerage operations in Palau; (ii) the financial status of the PPUC and the PWSC; and (iii) assessing "the timing and process through which the PWSC should become operational by March 31 2013, or

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<sup>14</sup> A special program review mission from 13-17 August 2012 determined that about one-third of the policy actions had been achieved. Those policy actions that had not been achieved were those necessary to be undertaken by PWSC with the exception of A.1, A.2, and B.1 which were the responsibility of the government (Appendix 2 details the Policy Matrix).

whether it would be more financially appropriate for the water and sewer operations to be merged into the PPUC.”

31. At the request of the government, an ADB mission visited Palau from 19-26 February 2013 to assist the Water and Sewer Task Force in its assessment of the relative merits and implications of a merger of the PPUC and the PWSC. Discussions with the Executive as well as with Task Force members revealed that the key drivers of the decision to merge the two utilities included a belief that (i) unless the PWSC met all of the Program Policy conditions on 31 March 2013, the second tranche of the loan would be cancelled; (ii) the process of incorporation of the PWSC was negatively impacting the BPW and PWSC’s ability to provide services; and (iii) substantial operational cost savings could be derived from the immediate merger of the PPUC and the PWSC. While the first assumption was quickly addressed by ADB, indicating that the tranche release would be processed once the conditions were met, the second and third assumptions were addressed in an ADB report to the Task Force. ADB assessed the merits of the immediate merger of the PWSC and the PPUC in terms of whether or not it would achieve the government’s objectives of improved service delivery and cost savings. The ADB mission found that while a merger of the two utilities, if carefully planned and executed, could achieve some cost savings and improved efficiencies, an immediate merger would almost certainly create confusion and a further diffusion of responsibility for service delivery, without generating near-term cost savings. What could be achieved in the near term, however, was the appointment of a common board for the PPUC and the PWSC and the establishment of shared services between the two entities. The conclusion was to defer the full legal and operational merger of the PWSC and the PPUC until a thorough review of the structure of the merged entity was completed.<sup>15</sup> A further recommendation was to repeal or amend EO No. 324, allowing the PWSC to complete its corporatization process. However, the PWSC and PPUC merger went ahead and was completed on 6 June 2013 and became law under RPPL No. 9-4. It had an effect on how water and wastewater rates were to be charged to users (paras 17-19 refer).

32. ADB held detailed consultations with the government, the PWSC board, and the PWSC chief executive officer (CEO). Through a memorandum of understanding, the government agreed to a new timetable to achieve all second-tranche policy actions by 31 March 2013. This would also result in the PWSC becoming fully operational and taking over the service from the government. The PWSC CEO prepared a memorandum of understanding to guarantee the government’s financial and human resources to PWSC to help achieve the agreed timetable. Due to the delays, the mission recommended that the disbursement schedule be adjusted for a second tranche release in April 2013. The second tranche was approved on 19 November 2013 and disbursed on 21 November 2013.<sup>16</sup>

33. A subsidiary loan agreement between the MOF and the PPUC was agreed on 12 September 2013. The financing provided under the agreement has two separate and distinct components. The first was financing provided to strengthen PPUC operations to enable it to transition itself to become a financially sound commercial entity. Loan financing of \$6.2 million was provided for this. The PPUC paid interest on the loan at the same rate as the government paid to ADB, as specified in the OCR loan agreement. The second component was a grant of \$2.6 million in FY2012 to support the WWO in achieving sustainability to reach full cost

<sup>15</sup> ADB offered to provide technical assistance to undertake the analysis.

<sup>16</sup> The ADB approved an amendment of the Program loan agreements to reflect the changes in the institutional arrangements for delivery of water and sewerage services in Palau and to record the PPUC as the successor to the PWSC.

recovery. The subsidiary loan agreement had a term of 25 years, including a grace period of 5 years. Appendix 3 lists the chronology of major implementation events.

## **F. Implementation Arrangements**

34. The implementation arrangements were as envisaged at appraisal. These were adequate as designed to deliver program outputs and to achieve the program purpose. In practice, the implementation arrangements were satisfactory. The MOF was the executing agency (EA) and was responsible for the overall implementation of the program, including compliance with all policy actions, administration, disbursements, and maintenance of records. A program implementation unit (PIU) was established within the MOF to support the ministry in its role and provide ongoing support to the implementing agencies (IAs). The IAs were the MOF; the Ministry of Public Infrastructure, Industry, and Commerce (MPIIC); and the PWSC, once it was established and in operation. Each of the IAs was responsible for meeting the policy actions, or for the program activities under their respective Ministries and Authority. The PIU included (i) a utility manager with international experience and expertise in either water supply or sanitation sector operations; (ii) a water supply or sanitation operations manager, depending on the experience of the utility manager, with international experience; (iii) a financial management specialist; and (iv) secretarial support. The PIU could also engage additional short-term consultants as required during program implementation. A Program Steering Committee (PSC) was formed and chaired by the MOF. The members included the Minister for MPIIC, the Financial Adviser to the Vice President, the Legal Adviser to the President, and the General Manager of the PIU. The PSC was responsible for overall direction, guidance, monitoring, and providing an oversight role for the program. The PSC was to meet at least on a quarterly basis to discuss progress.

35. Although the PWSC was established in September 2011 and started operations in August 2012, it was merged with the PPUC through EO No. 324 on 6 June 2013 (para 31 refers). In terms of monitoring and reporting, the PSC had meetings in 2011. The PWSC had meetings in 2011 and 2012, and supplied monthly reports and monitoring reports in 2013. After the PWSC was merged with the PPUC on 6 June 2013, ADB received no further reports from the PPUC or the PSC. Since the merger of the PWSC and the PPUC, the PPUC has made no effort in any systematic way to monitor progress or performance around the program indicators in the DMF.

## **G. Conditions and Covenants**

36. The government and the EA generally complied with major covenants, all of which were relevant, as well as ADB's Anticorruption Policy and its provisions, which were included in the loan regulations. The program used ADB's policy-based lending modality and was based on the 23 September 2010 development policy letter and the policy matrix (see Appendix 2). All the required policy actions in the policy matrix were achieved for tranche releases. No covenants were modified, suspended, or waived during the program. However, several covenants were not fully complied with, particularly monitoring reports and monthly reports on progress. The PSC stopped having meetings after 2011 and the role of the PSC was taken over by the Board of the PWSC until its merger with the PPUC in June 2013. The borrower was also to submit a program completion report not later than three months after program completion. No program completion report was received by ADB. Details of compliance with the major covenants under the loans are in Appendix 4.

## **H. Related Technical Assistance**

37. No related technical assistance was associated with the program design or implementation. To further support the capacity development of the PWSC (and subsequently the PPUC), ADB utilized resources under an existing project preparatory technical assistance (PPTA) to facilitate its transition to operational effectiveness.<sup>17</sup> PPTA funds helped develop the maintenance, operations, and infrastructure investment plans. Due to financial management issues (e.g., budget preparation and management needed improvement, cash-management planning inhibited the ability to plan and manage expenditure), the government sought ADB's assistance to strengthen budget preparation and management.<sup>18</sup> Linked with this work, the Pacific Financial Technical Assistance Centre was working with the MOF to strengthen cash management.

## **I. Consultant Recruitment and Procurement**

38. No consultants were recruited for the design or implementation of the program. However, in order to support the program's implementation, the PPUC engaged the short-term services of operations and management personnel for financial and technical support to the management. On 12 September 2013 a financing agreement was made between the MOF and the PPUC for a grant of \$2.6 million and a loan up to \$6.2 million to improve the PPUCs technical and management capability. The specialists directly contributed to the day-to-day operations and management of the PPUC. Two specialists were provided for a period of 15 months. Initially, three people were to be recruited but only two became available before the merger of the PWSC and the PPUC. The specialist personnel included an advisor to the Board of Directors and the CEOs, and an operations advisor. Through the CEO of the PWSC, the team of advisors assisted the program steering committee to meet all policy actions required for the second tranche release of the ADB loan.

## **J. Performance of Consultants, Contractors, and Suppliers**

39. No consultants, contractors, or suppliers were involved in the design or implementation of the program except for the two advisors recruited to assist the PPUC under the financing agreement between the MOF and the PPUC (para 39 refers).

## **K. Performance of the Borrower and the Executing Agency**

40. Although there was a 13-month delay from Board approval to loan effectiveness and thus the release of the first tranche, the cause of the delay was a 12-month delay by Congress in signing into law an Act creating the PWSC and the Act authorizing the President of Palau to sign the loan agreements. Subsequently, there was a delay in the release of the second tranche from the original appraisal estimate. However, the implementation of the program loans was closed on 2 April 2014 before the appraisal loan closing date of 28 February 2015. Although some of the covenants were not fully complied with (para 37 refers), the performance of the borrower and the EA is rated *satisfactory*.

<sup>17</sup> ADB. 2009. *Technical Assistance to Palau for Preparing the Sanitation Sector Development Project*. Manila.

<sup>18</sup> ADB. 2009. *Technical Assistance to the Republic of Palau for Implementing a Medium-Term Budget Framework*. Manila (TA 7421-PAL).

## **L. Performance of the Asian Development Bank**

41. The program was administered and supervised from ADB headquarters. Two ADB project officers were involved in the implementation of the program. ADB staff actively monitored the program's progress and the completion of policy triggers for the first and second tranche release. ADB conducted review missions throughout the implementation of the program and a mission to assist the Water Task Force on the merger of the PWSC and the PPUC (para 32 refers). The missions included discussions with the PWSC and the PPUC to discuss and solve problems. Overall, ADB's performance is rated *satisfactory*.

## **III. EVALUATION OF PERFORMANCE**

### **A. Relevance**

42. The program was appropriate and relevant at appraisal and during its implementation and remains so at completion. It was and is consistent with the strategy of ADB's country partnership strategy, which supports government goals and actions in the MTDS. These were (i) investing in the water and sanitation sector; (ii) moving state-owned enterprises toward full cost recovery; and (iii) reducing government expenditure by eliminating subsidies. The creation of a water and sewer corporation to focus on providing sustainable water and sewerage services was critical. Sustainable services can only be effectively delivered in Palau through a full cost-recovery, commercially focused utility with tariffs meeting all operations and maintenance costs. Moreover, to avoid the need to develop further water supply infrastructure, reducing the consumption of water and reducing non-revenue water was also critical. The program remained relevant throughout the period of its implementation and continues to be a priority. The program is rated *relevant*.

### **B. Effectiveness in Achieving Outcome**

43. The program outcome envisaged at appraisal was that the demand for water and sewerage services would be met. The overall program effectiveness rating is derived from the indicators in the DMF. Some but not all of these indicators were met. It was envisaged that nonrevenue water would be less than 25% by FY2015 from a baseline of 43% in 2010. Nonrevenue water in FY2015 was 39% and did not reach the targeted figure. The projected demand for water at appraisal was forecast to be 3.0 million gallons per day in FY2015, within the supply capacity (it was estimated in FY2010 that the demand was 3.8 million gallons per day). The actual demand in FY2015 was 2.9 million gallons per day, well within the supply capacity of 4 million gallons per day. At appraisal, the baseline demand in FY2010 was estimated. In FY2014 and FY2015, metering was introduced and thus the actual FY2015 figure of 2.9 million gallons per day is accurate and well within the supply capacity. The program is rated *effective*.

44. Another indicator at appraisal was that the continuity of water supply to users would increase to 99.9%+ by FY2014 (the FY2010 baseline was 95%). In FY2015, the continuity of water supply was 100%. It was expected that households would reduce their water consumption by 30% by FY2015 from a FY2009 baseline of 169 gallons/capita/day. The actual water consumption of households in FY2015 was 172.67 gallons/capita/day. Although this is higher than the estimated figure, it has to be taken into account that there was no metering in FY2009 and the estimated figure of 169 gallons/capita/day was a lot higher as the tariff was a flat rate. Water consumption was partially metered in FY2014 and fully metered by FY2015, so the FY2015 water consumption figure of 172.67 gallons/capita/day reflects the actual usage.

45. The final outcome envisaged at appraisal was that the number of uncontrolled sewage overflows would be reduced by more than 20% by FY2015 (the FY2010 baseline was 20 uncontrolled overflow events). The actual number of uncontrolled overflow events in FY2015 was eight. In FY2014, there were only three. The increases in FY2015 were due to the pumps being old. They will be replaced under the Koror-Airai Sanitation Project approved in October 2013 and thus the number of uncontrolled sewerage overflows will reduce even further. In FY2015 the number of uncontrolled overflow events had reduced by 40% from 20 in FY2010 to eight in FY2015. Bearing in mind that several of the appraisal targets, especially estimates of water consumption, were underestimated due to water not being metered, the overall program is assessed as *effective*.

### **C. Efficiency in Achieving Outcome and Outputs**

46. In terms of process efficiency, there were delays in releasing the tranches<sup>19</sup> and thus completing the outputs in the time frame envisaged at appraisal. Tranche 2 actions experienced delays amid substantial changes in the operating context, including a change in government, and the merger of the PWSC and the PPUC. There were four outputs envisaged at appraisal (para 7 refers), but these outputs were delayed from the time schedule envisaged at appraisal. Due to the delays caused, especially over the merger of the PWSC and the PPUC, the program efficiency is rated as *less efficient*.

### **D. Preliminary Assessment of Sustainability**

47. The success of the PPUC hinges on financial stability. Setting the right tariffs, becoming efficient, and maximizing collections, all have a role to play, but making sure the enabling environment for this is right is the first step. The PPUC has, through yearly public meetings, disseminated information on tariff increases to the public, and given advice to residents on how to reduce their water consumption, etc. Tariffs can be adjusted at any time with proper notice to the public and the holding of public hearings. The Water and Sewer Corporation Act 2010 specifically requires that tariffs be set to cover all operating and maintenance costs, debt servicing, and depreciation. Although the government still underwrites the losses in the water and sewerage sector by yearly subsidies, these subsidies have declined dramatically over recent years. As noted previously, the government still makes a payment for service, a community service obligation, to cover the costs of the PPUC supplying the outlying states with water (paras 17-19 refer). Sustainability is largely assessed as *likely*.

48. It was envisaged at appraisal that government budget support by FY2015 would be eliminated. This, however, has not been the case. The subsidy in 2010 from the government to the water and sewer sewerage sector was \$2.4 million. In FY2017 it has been estimated at \$1.2 million. Appendix 5 undertakes a financial analysis of the water and sewerage sector detailing revenues, expenditures, tariffs, and government subsidies.

### **E. Impact**

49. At appraisal the impact of the program was for sustainable water and sewerage services. The indicators to measure this were that (i) government transfers to the water sector

<sup>19</sup> The first tranche was to be released in December 2010 after loan effectiveness but due to the delay in effectiveness was not released until December 2011. Similarly, for the second tranche the appraisal estimate was that it would be released in July 2012, but due to the merger of the PWSC and the PPUC, it was not released until November 2013.



would be eliminated by 2015; and (ii) the annual revenue of the PWSC (which is now PPUC since the merger on 6 June 2013) would exceed costs by 2014. Neither of these targets has been accomplished. In FY2015 the total loss of the sector was \$3.7 million. Government support in FY2015 was \$3.5 million, leaving a shortfall of \$0.164 million to be covered by the PPUC. The loss to the sector has declined since FY2015, and in FY2016 it is expected to be about \$1.84 million. Projections for FY2017 show it declining further to \$1.38 million.

50. In terms of safeguards, the program was classified under category C for environment, involuntary resettlement, and indigenous peoples. Positive environmental outcomes have resulted from improvements in the legal and regulatory policies of the water and sewerage sector, public meetings on water conservation, and the strengthening of environmental quality-control regulations relating to water abstraction and sewerage outflow.

#### IV. OVERALL ASSESSMENT AND RECOMMENDATIONS

##### A. Overall Assessment

51. The program was relevant at the time of appraisal and continued to be so during program implementation. The program outcome envisaged at appraisal was that the demand for water and sewerage services would be met. The overall program was rated *effective*. Some of the indicators in the DMF were met and others were not. However, overall the program was rated *effective*. In terms of efficiency the program was rated *less than efficient*, as there were delays in releasing the tranches and a merger of the PWSC and the PPUC also delayed the completion of the outputs in the time frame envisaged at appraisal. The program outcomes are *likely sustainable*, taking into account the strong commitment of the government. The PPUC has held regular public meetings and disseminated information on tariff increases. Although the government still pays the losses in the water and sewerage sector by yearly subsidies, these subsidies have declined dramatically over recent years. The program is rated *successful* overall based on a review of its relevance, effectiveness, efficiency, and sustainability. Appendix 6 includes the quantitative assessment of program performance to determine the program rating. The program was *relevant* to the government and ADB's strategy and design.

##### B. Lessons

52. There were significant delays to the disbursement of both the first tranche and the second tranche. The first tranche disbursement was delayed by 12 months due to the delay by Congress in signing into law an Act creating the PWSC and the Act authorizing the President of Palau to sign the loan agreements. The delay with the second tranche was a consequence of the initial delay in the first tranche but also reflected political changes, including parliamentary elections that brought a new government into power, and the subsequent government personnel changes which disrupted the reform agenda. To avoid delays, greater attention is required to identify potential risks and to build measures, possibly through additional time-bound policy actions, to mitigate such potential risks.

53. After the PWSC was established, progress towards implementation of the program was satisfactory. Regular meetings of the PSC took place, and the PWSC undertook both monitoring and monthly reports. But after Presidential EO No. 324, ordering the PWSC to halt its incorporation and start-up activities while a merger of PWSC and PPUC was examined, effective program implementation came to a halt. Even though ADB and the Task Force advised against a merger at the time, the Olibiil Era Kelulau (OEK) (bicameral Congress), and the President authorized the merger on 6 June 2013, with the PPUC taking over as implementing

agency. After the merger, no meetings of the PSC took place and the PPUC did not provide monthly reports of progress. On completion of the program, it did not provide a program completion report. In order for a program to be implemented successfully and as envisaged at appraisal, ADB must include mechanisms in the program design to ensure that agreed reforms can be implemented in a changing political environment.

## **C. Recommendations**

### **1. Program Related**

54. **Further action or follow-up action.** Further political and public-sector reforms will further improve the efficiency and effectiveness of the agencies responsible for overseeing, owning, implementing, and maintaining the water and sewerage sector assets.

55. **Additional assistance.** ADB should discuss the need for further technical advisory assistance with the government and the PPUC so that it can improve on its operational ability in the sector.

56. **Maintenance.** The maintenance of facilities in the water and sewerage sector is critical to the long-term success of the sector. ADB should continue to regularly monitor the maintenance of the sector through the government's annual submission of budget allocations and through the Koror-Airai Sanitation Project. ADB should also coordinate with other development partners to ensure that maintenance of facilities implemented by other donors is undertaken adequately.

57. **Covenants.** As recorded in Appendix 4, all particular covenants specified as reform actions and measures in the policy matrix were completed and do not need to be further monitored.

58. **Timing of program performance evaluation report.** It is recommended that a program performance evaluation is undertaken in approximately 2 to 3 years time to determine if the program is still meeting its objectives and that full cost recovery has been made and government budget support is no longer required.

### **2. General**

59. ADB should through its ongoing project for the Koror-Airai Sanitation Project continue to monitor the annual budget and annual budget performance reports of the government to ensure that the sector is being sufficiently supported.

60. Although program loans are an effective mechanism to help with policy actions, it is also necessary to have well designed technical assistance to support implementation of the program.

## DESIGN AND MONITORING FRAMEWORK

Design Summary	Appraisal Performance Indicators/Targets	Program Achievements	Details and Issues
<b>Impact</b>  Sustainable water and sewerage services	<p>Government subsidies to the water sector are eliminated by 2015 (2010 baseline: \$2.4 million per annum).</p> <p>PWSC annual revenue exceeds costs by 2014 (2010 baseline: \$2.4 million loss)</p>	<p>Government transfers not eliminated, as the government has a community service obligation to outlying states.</p> <p>PWSC was merged with PPUC in June 2013. The intent was to allow shared administrative costs and so reduce total costs across the entire organization. However, in practice this was not achieved. Revenues still do not exceed costs in FY2015</p>	<p>Total government support in FY2015 was \$3.543 million. Appendix 5 gives full details.</p> <p>PWSC was merged with PPUC on 6 June 2013. In FY2014 revenues did not exceed costs and there was a loss of \$4.783 million. This reduced in FY2015 to a \$3.707 million loss. Appendix 5 gives details on revenues and expenditures.</p>
<b>Outcome</b>  Demand for water and sewerage services is met.	<p>Nonrevenue water is less than 25% by FY2015 (2010 baseline: 43%)</p> <p>Projected demand for water in FY2015 of 3.0 million gallons per day is within supply capacity (2010 baseline: demand is 3.8 million gallons per day)</p> <p>The continuity of water supply to users increases to 99.9%+ by 2014 (2010 baseline: 95%)</p> <p>Households reduce water consumption by 30% by FY2015 (2009 baseline: 169 gallons/capita/day)</p>	<p>Nonrevenue water was 39% in FY2015 and not below the targeted 25%.</p> <p>Demand for water in FY2015 was 2.9 million gallons per day. Supply capacity in FY2015 was 4.0 million gallons per day.</p> <p>Continuity was 100%</p> <p>Household water consumption was 172.67 gallons/capita/day in FY2015.</p>	<p>The baseline demand in FY2010 and the projected demand for FY2015 are both estimated. The actual demand in FY2015 is metered (of 14 outlying states i.e. not including Koror and Airai, only 5 states are metered. The remaining 9 outlying states have an estimated water consumption to give the overall demand as 2.9 million gallons in FY2015.).</p> <p>Water consumption was partially metered in FY2014 and fully metered by FY2015. The baseline figure in 2009 of 169 gallons/capita/day was estimated and was probably a lot higher as water was not metered. Hence, no reduction can be seen as the 2009 figure is estimated and was probably a lot higher as a fixed flat tariff was in existence and thus, water</p>



Design Summary	Appraisal Performance Indicators/Targets	Program Achievements	Details and Issues	
4.Effective public consultation in place	<p>Tariff for nonresidential water is \$3.36/1,000 gallons by FY2015 (2010 baseline: \$0.85)</p> <p>Tariff for nonresidential sewer is \$3.73/1,000 gallons by FY2015 (2010 baseline: \$0)</p> <p>Public supports the creation of a PWSC during congressional hearings (T1C)</p> <p>Water conservation community awareness plan developed and implemented by April 2012 (T2C)</p> <p>Health awareness support plan developed and implemented by April 2012 (T2C)</p>	<p>Tariff in FY2015 was \$4.51/1,000 gallons. Tariff in FY2016 is \$5.41/1,000 gallons</p> <p>Tariff in FY2015 was \$4.13/1,000 gallons. Tariff in FY2016 is \$4.95/1,000 gallons</p> <p>A communication and consultation plan for the establishment of the PWSC was signed by the Minister of Finance on 1 October 2010</p> <p>Water conservation community awareness plan established in September 2012.</p> <p>Health awareness support plan established in September 2012.</p>	<p>Appendix 5 gives details on tariffs.</p> <p>Appendix 5 gives details on tariffs.</p>	
<b>Activities with Milestones</b> <b>1. Legal and Policy framework for water sector improvements is in place (due December 2010).</b> Actual – December 2011 1.1 Creation of legislation enacting PWSC and its regulations (T1C) 1.2 Definition of the powers of a corporatized body’s board of directors, including the power to set tariffs 1.3 Tariff reform with provisions for (a) universal metering of consumers supplied from the Koror–Airai water supply system; (b) differentiation of residential and nonresidential consumers; (c) introduction of a block water supply tariff for residential consumers, and introduction of sewerage charges; and (d) increasing the average water tariff (T1C) 1.4 A national water resources management plan is prepared (T2C) 1.5 Changes to environmental legislation and regulations enacted (T2C).  <b>2. An independent PWSC delivers improved services (due December 2012).</b> Actual – Established September 2011 and started operation in August 2012. Merger of PWSC and PPUC . Executive Order No. 324 January 2013 for Water and Sewer Task Force to examine merger. 6 June 2013 merger of PWSC and PPUC. 2.1 A phased implementation plan for PWSC is prepared (T1C) 2.2 A phased transfer plan of the BPW water and sewer operations staff and assets to PWSC is prepared (T2C) 2.3 Implementation of an asset transfer plan 2.4 Implementation of a staff/organization plan; preparation of a capacity building plan 2.5 Preparation of technical guidelines and standards (T2C) 2.6 Update of water sector investment plans (T2C) 2.7 Development of commercial systems and procedures including customer billing and collection (T2C) 2.8 Capacity development of BPW staff to undertake core planning and management functions 2.9 Development of a human resource strategy for the urban water supply sector 2.10Dissemination of technical and management guidelines (T2C)			<b>Inputs</b>  <b>Appraisal ADB:</b> ADF - \$3.40 million million OCR - \$12.60 million million  <b>Government:</b> \$1.2 million	<b>Actual ADB:</b> ADF - \$3.47 million OCR - \$12.60 million  <b>Government:</b> \$1.7 million

Design Summary	Appraisal Performance Indicators/Targets	Program Achievements	Details and Issues
<input type="checkbox"/> 2.1 2.11 Installation of service connection meters on all unmetered connections (T2C) <input type="checkbox"/> 2.2 2.12 Provision of meter-testing and calibration equipment, testing, and calibration of all existing service connection meters 2.1 2.13 Installation of flow meters within the existing network and at all storage tanks (T2C) 2.14 A comprehensive leak detection and repair program is implemented.  <b>3. Full cost recovery is achieved in the water and sewerage sector (due April 2012).</b> Actual – full cost recovery not expected to occur until FY2018. 3.1 Implementation of tariff reforms (T1C and T2C). 3.2 Development of the government and PWSC financing agreement (T2C).  <b>4. Effective public consultation is in place (due December 2012).</b> Actual – Community consultation plan signed by Minister of Finance on 1 October 2010. Public hearings held yearly on water and sewerage tariffs, also radio talk shows. Awareness plans for water and health in place 28 September 2012 and public awareness programs in public meetings with tariffs information undertaken, Radio talk shows and brochures distributed. Last public hearing was August 2016. 4.1 Conduct public consultations on legislation to create a water supply and sewerage authority 4.2 Conduct public consultation on changes to water and sewerage tariffs. 4.3 Implement a public awareness program on water conservation and health.			

ADF = Asian Development Fund, BPW = Bureau of Public Works, OCR = ordinary capital resources, PSC = program steering committee, PWSC = Palau Water and Sewer Corporation, PPUC = Palau Public Utilities Corporation, T1C = tranche 1 condition, T2C = tranche 2 condition.

Source: Asian Development Bank.

## POLICY MATRIX

Policy Areas and Actions are grouped into the following:

- A. Legal and policy framework for water sector improvement is in place;
- B. An independent PWSC delivers improved services;
- C. Full cost recovery is achieved in the water and sewerage sector; and
- D. Effective public consultation is in place.

Policy Actions for First Tranche Release (Upon Loan Effectiveness)	Status	Policy Actions for Second Tranche Release (Target Date for release in April 2012)	Status
A. Legal and policy framework for water sector improvement is in place.			
<p>A.1. The Law on the establishment of an autonomous independent Water and Sewer Authority (PWSC) will have been enacted and declared effective.</p> <p>A.2. The Government will have issued a regulation on the increase of water supply charges to be effective 1 February 2011, in accordance with the following scheme:            (i) Domestic, 25% increase on the current metered water supply charge for the first 5,000 gallons;            (ii) Domestic, 25% increase on flat fee water supply charge;            (iii) Domestic, 50% increase on the current metered water supply charge for consumption in excess of 5,000 gallons per month;            (iv) Non-Domestic, 50% increase on the current volumetric water supply charge.</p> <p>A.3. The government will have issued a regulation to levy a volumetric sewerage charge on metered connections to be effective 1 February 2011, in accordance with the following scheme:            (i) Domestic, \$0.30/1,000 gallons of water used;            (ii) Non-Domestic, \$1.70/1,000 gallons of water used.</p>	<p>PWSC Act was approved by the OEK 29 September 2011 and signed into law on 30 September 2011</p> <p>A regulation was signed by the Minister of Finance on 6 December 2010 and became effective on 1 February 2011.</p> <p>The regulations to implement fees and charges for water and wastewater services issued on 6 December 2010 detail the water charges applicable for 2011 and 2012. Water supply charges increased on 1 February 2012 in accordance with the regulations for 2012 and reflect the water charge increases scheduled in the loan agreements.</p>	<p>A.1. The President will have approved the National Water Resources Management Plan, in a form and substance acceptable to ADB.</p> <p>A.2. The government will have submitted to the OEK a bill, in a form and substance, acceptable to ADB, which would provide a mandate for the regulation of water abstraction.</p> <p>A.3. PWSC1 will have issued a regulation to increase the water supply charges, to be effective 1 February 2012, in accordance with the following scheme:            (i) Domestic, 10% increase on the existing metered water supply charge for the first 5,000 gallons;            (ii) Domestic, 10% increase on the existing flat fee water supply charge;            (iii) Domestic, 50% increase on the existing metered water supply charge for consumption in excess of 5,000 gallons per month;            (iv) Non-Domestic, 50% increase on the existing metered water supply charge.</p> <p>A.4. PWSC (footnote 1) will have issued a regulation to increase the volumetric sewer charge on sewerage connections, to be effective 1 February 2012, in accordance with the following scheme:            (i) Domestic, 5% increase on the existing volumetric charge;            (ii) Non-Domestic, 30% increase on the existing</p>	<p>The President endorsed the Water Policy for the Republic of Palau on 17 April 2012.</p> <p>A draft bill to regulate water abstraction submitted to the OEK on 27 May 2013. The bill was introduced to the OEK House of Delegates and the Senate on 18 June 2013.</p> <p>The regulations to implement fees and charges for water and wastewater services issued on 6 December 2010 detail the water charges applicable for 2011 and 2012. Water supply charges increased on 1 February 2012 in accordance with the regulations for 2012 and reflect the water charge increases scheduled in the loan agreements.</p> <p>On 1 February 2012, the domestic volumetric charge was increased by 5% from \$0.30 per 1,000 gallons of</p>

Policy Actions for First Tranche Release (Upon Loan Effectiveness)	Status	Policy Actions for Second Tranche Release (Target Date for release in April 2012)	Status
		volumetric charge.	metered water consumed to \$0.315 per 1,000 gallons of metered water consumed. On the same date, the nondomestic volumetric charge was increased by 30% from \$1.70 to \$2.21 per 1,000 gallons of metered water consumed
B. An independent PWSC delivers improved services.			
B.1. PSC will have endorsed a detailed transitional plan, acceptable to ADB, enabling PWSC to begin full operations which at least encompass activities to: (i) appoint consultants (ii) appoint the PWSC Management Team and board Members (iii) establish the financial management systems (iv) establish the billing and collections systems.	A transitional plan agreed by PSC (and signed by the PSC Chair) was endorsed by ADB on 10 October 2011	B.1. The President will have declared that PWSC is in full operation to take over the responsibility for managing and operating water and sewerage service in Palau.  B.2 PWSC will have: (i) control of the assets, determined as of 1 October 2011, to belong to the MPIIC Division of Water and Sewerage; (ii) a staff establishment not less than the number and skills, determined as of 1 October 2010, to belong to MPIIC Division of Water and Sewerage and the Division of Billing and Collection of the MOF; (iii) established commercial systems and procedures including customer billing and collections.  B.3. PWSC will have prepared, approved, and implemented a user-pays policy for water and sewerage service such that: (i) all illegal connections are disconnected; (ii) non-metered connections are identified; (iii) a schedule for connecting meters to unmetered sites and network assets is prepared.  B.4. PWSC will have prepared, approved, and implemented a policy and plans, acceptable to ADB, for asset maintenance and infrastructure replacement.	The WWO was declared operationally effective through Executive Order No. 343 signed by the President on 23 July  BPW water and sewerage personnel and assets were transferred to PWSC through Executive Order No. 332 signed on 19 April 2013; they moved to PPUC on 6 June 2013 upon the promulgation of the Utilities Consolidation Act. The transfer of BPW personnel to PPUC is now complete, although establishing the contracts for the 109 staff that were transferred took several months.  The PPUC Board has adopted and is implementing a "user pays" policy for water and sewerage services. The policy mandates (i) the identification and immediate disconnection of illegal connections,



Policy Actions for First Tranche Release (Upon Loan Effectiveness)	Status	Policy Actions for Second Tranche Release (Target Date for release in April 2012)	Status
		<p>B.5. PWSC will have prepared, approved, and implemented a policy on operational performance, which include guidelines on technical standards and an institutional development plan, acceptable to ADB</p> <p>B.6 PWSC will have adopted performance benchmarks to monitor its operations performance, including:</p> <ul style="list-style-type: none"> <li>(i) universal metering of domestic and commercial water connections metered;</li> <li>(ii) Non-revenue water to be 25% by FY2015;</li> <li>(iii) Collections at 95% by FY2015</li> </ul>	<p>(ii) semiannual auditing of the WWO customer database supported by PPUC leak-detection program, and (iii) universal metering of all customers and application of volumetrically based water and sewerage services by mid-2014. The policy also enables PPUC to disconnect or limit the supply of water to customers with billing arrears greater than 60 days</p> <p>The PPUC Board has adopted an asset maintenance policy that details the maintenance and replacement policies and principles to apply to water and sewerage assets. ADB has reviewed the policy and considers it acceptable.</p> <p>The PPUC Board has approved (i) a policy on technical standards for operational performance for water and sewerage services; and (ii) an institutional development plan for the WWO. ADB has reviewed and has no objection to the PPUC technical standards for operational performance. The policy on technical standards for operational performance set guidelines</p>

Policy Actions for First Tranche Release (Upon Loan Effectiveness)	Status	Policy Actions for Second Tranche Release (Target Date for release in April 2012)	Status
			<p>for universal metering of water customers and nonrevenue water. The institutional development plan presents the WWO's 5-year corporate plan, statement of corporate intent, operations plan, human resources plan, financial forecasts plan, capital investment plan, and administration plan.</p> <p>The PPUC Board has adopted water and sewerage performance benchmarks for five corporate objectives: (i) full cost recovery for water and sewerage operations by the end of FY2015; (ii) water operational improvement through (a) the reduction of nonrevenue water to less than 25% by FY2015, (b) improvement in the continuity of the water supply to 99.9% by FY2014; and (c) reduction of household water consumption by 30% by FY2015; (iii) 20% reduction in the number of uncontrolled sewage overflows by FY2015; (iv) increase in bill collections to 95% by FY2015 (achieved); and (v) development and implementation of a water conservation community</p>

Policy Actions for First Tranche Release (Upon Loan Effectiveness)	Status	Policy Actions for Second Tranche Release (Target Date for release in April 2012)	Status
			awareness plan and a health awareness support plan by December 2012 (achieved)
C. Full cost recovery is achieved in the water and sewerage sector.			
C.1. The Budget Bill submitted to OEK will have shown that the government has allocated \$2,526,000 to MPIIC for the supply of water and sewerage services budget line, for FY2011 operations and maintenance costs.	The FY2011 budget bill, with an allocation of \$2,526,000 to MPIIC for water and sewerage services was submitted to the President of the Senate (OEK) on 1 June 2010	C.1. The government will have allocated \$1,500,000 budget for PWSC operations for FY2012.  C.2. A financing agreement, in a form and substance acceptable to ADB, between the MOF and PWSC for a grant in the amount not exceeding \$2.6 million and a loan in the amount not exceeding \$6 million will have been signed, in order to: (i) provide financial support to improve technical and management capability; (ii) provide budget support to meet the shortfall between operations, maintenance, debt servicing, and depreciation costs, less projected PWSC.	The OEK approved budget appropriations of \$3,721,901 for water and sewerage operations  A financing agreement between the Ministry of Finance and PPUC for a grant of \$2.6 million and a loan of up to \$6.2 million was executed on 12 September 2013
D. Effective public consultation is in place.			
D.1. The MOF will have prepared, approved and implemented a Community Consultation Plan (CPP) for the establishment of PWSC.	A communication and consultation plan for the establishment of PWSC was signed by the Minister of Finance on 1 October 2010	D.1. PWSC will have prepared, approved and implemented the Water Conservation Community Awareness Plan.*  D.2. PWSC will have prepared, approved and implemented the Health Awareness Support Plan.*	Awareness plans for water and health in place 28 September 2012 and public awareness programs in public meetings with tariffs information undertaken. Radio talk shows broadcast and brochures distributed. Last public hearing was August 2016.

BPW = Bureau of Public Works, EQPB = Environmental Quality Control Board, Government of Palau = Government of Palau, HR = human resources, HRD = human resource development, OEK = Olbiil Era Kelulau (Congress) and PWSC = Palau Water and Sewer Corporation.

\*These policy actions are not conditions to tranche release.

Source: Asian Development Bank.

**CHRONOLOGY OF MAJOR EVENTS**  
**Loan No. 2691-PAL and Loan 2692-PAL (SF)**

Date	Event
<b>2009</b>	
15 Oct	Letter of request from the Vice President of the Republic of Palau asking for ADB assistance in improving the water sector.
<b>2010</b>	
??	Palau Water and Sewer Corporation Act
May	ADB reconnaissance mission agrees on preparation of Water Sector Improvement Program (WSIP)
26 July–6 Aug	Fact-finding mission
30 Aug	Management Review Meeting
01 Oct	A communication and consultation plan for the establishment of the Palau Water and Sewer Corporation (PWSC) signed by the Minister of Finance
09 Nov	Loan approval
06 Dec	Regulation signed by the Minister of Finance on the increase in water supply charges, became effective on 1 February 2011
<b>2011</b>	
7 March	Program steering committee (PSC) Meeting
5 June	PSC Meeting
23 Sept	Loan negotiations
30 Sept	Establishment of PWSC, and operations started in August 2012
06 Oct	Loan signing
05 Dec	Loan effectiveness
10 Oct	PSC Meeting
14 Dec	First Tranche disbursed (\$6.40 million OCR and \$3.40 million ADF)
<b>2012</b>	
25–27 Jan	Country Programming, Country Operations Business Plan Mission
2 Feb	PWSC Board Meeting
17 April	President endorses Water Policy for the Republic of Palau
12 July	PWSC Board Meeting
13–17 Aug	Special Program Review Mission
<b>2013</b>	
3 Jan	PWSC Progress Report on Low Water Pressure
24 Jan	President submits draft to House of Delegates to merge PWSC and Palau Public Utilities Corporation (PPUC)
30 Jan	Executive Order (EO) No. 324 ordered PWSC to stop incorporation activities and established a Water and Sewer Task Force
11 Feb	PWSC Monthly Report for January
19–26 Feb	Country Consultation Mission
28 Feb	PWSC Monitoring Report
1 March	ADB Report to Water and Sewer Task Force on Proposed Merger
11 March	PWSC Monitoring Report
19 April	Bureau of Public Works (BPW) personnel and assets transferred to PWSC through EO No. 332 signed by the President
23–26 April	Country Partnership Consultation Mission

<b>Date</b>	<b>Event</b>
6 June	Upon promulgation of the Utilities Consolidation Act the personnel and assets were moved to PPUC.
23 July	Water and Wastewater Operations (WWO) Division established with EO No. 343 signed by the President
12 Sep	Financing agreement between Ministry of Finance and PPUC for a grant of \$2.6 million and a loan up to \$6.2 million to improve PPUCs technical and management capability
1–31 Oct	A large number of staff leave the former PWSC for personal reasons
19 Nov	Second Tranche approval
20 Nov	Amendment to Loan Agreement (Special Operations)
21 Nov	Second Tranche disbursed (\$6.2 million OCR)
<b>2014</b>	
02 Apr	Loan 2691-PAL and Loan 2692 (SF)-PAL closed
<b>2015</b>	
<b>2016</b>	
23–30 Aug	Program completion review mission

ADF = Asian Development Fund, OCR = ordinary capital resources, PSC=program steering committee meeting, PPUC=Palau Public Utilities Corporation, PWSC=Palau Water and Sewer Corporation.

Source: Asian Development Bank.

**STATUS OF COMPLIANCE WITH MAJOR LOAN COVENANTS**  
**Loan 2691-PAL and Loan 2692-PAL (SF)**

<b>Covenant</b>	<b>Reference in the Loan Agreement</b>	<b>Status of Compliance</b>
<b>Loan 2691</b>		
<b>Particular Covenants</b>		
The borrower shall cause the program to be carried out with due diligence and efficiency and in conformity with sound administrative, financial, engineering, environmental and water practices.	Section 4.01 (a)	Complied
In the carrying out of the program and operation of the program facilities, the borrower shall perform, or cause to be performed, all obligations set forth in Schedule 5 to the Special Operations Loan Agreement.	Section 4.01 (b)	Partly complied.  (see Schedule 5 compliance below)
The borrower shall make available, as promptly as needed, the funds, facilities, services and other resources that are required, in addition to the proceeds of the loan, for the carrying out of the program and for the operation and maintenance of the program facilities.	Section 4.02	Complied
The borrower shall ensure that the activities of its departments and agencies with respect to the carrying out of the program and operation of the program facilities are conducted and coordinated in accordance with sound administrative policies and procedures.	Section 4.03	Complied
The borrower shall maintain, or cause to be maintained, records and documents adequate to identify the eligible items financed out of the proceeds of the loan and to indicate the progress of the program.	Section 4.04 (a)	Complied
The borrower shall enable ADB's representatives to inspect any relevant records and documents referred to in paragraph (a) of this section.	Section 4.04 (b)	Complied
As part of the reports and information referred to in Section 7.04 of the Loan Regulations, the borrower shall furnish, or cause to be furnished, to ADB all such reports and information as ADB shall reasonably request concerning (i) the counterpart funds and the use thereof; and (ii) the implementation of the program, including the accomplishment of the targets and carrying out of the actions set out in the policy letter.	Section 4.05 (a)	Complied  Limited reporting.
Without limiting the generality of the foregoing or Section 7.04 of the loan regulations, the borrower shall furnish, or cause to be furnished, to ADB quarterly reports on the carrying out of the program and on the accomplishment of the targets and carrying out of the actions set out in the Policy Letter.	Section 4.05 (b)	Partly complied  Quarterly reports were not always received by ADB
<b>Loan 2692(SF)</b>		
<b>Particular Covenants</b>		
In the carrying out of the program and operation of the program facilities, the borrower shall perform, or cause to be performed, all obligations set forth in Schedule 5 to this loan agreement.	Section 4.01	Partly complied.  (see Schedule 5 compliance below)

<b>Covenant</b>	<b>Reference in the Loan Agreement</b>	<b>Status of Compliance</b>
The borrower shall maintain, or cause to be maintained, records and documents adequate to identify the eligible items financed out of the proceeds of the loan and to record the progress of the program.	Section 4.02 (a)	Complied
The borrower shall enable ADB's representatives to inspect any relevant records and documents referred to in paragraph (a) of this section.	Section 4.02 (b)	Complied
As part of the reports and information referred to in Section 6.05 of the loan regulations, the borrower shall furnish, or cause to be furnished, to ADB all such reports and information as ADB shall reasonably request concerning (i) the counterpart funds and the use thereof; and (ii) the implementation of the program, including the accomplishment of the targets and carrying out of the actions set out in the policy letter.	Section 4.03 (a)	Complied
Without limiting the generality of the foregoing or Section 6.05 of the loan regulations, the borrower shall furnish, or cause to be furnished, to ADB quarterly reports on the carrying out of the program and on the accomplishment of the targets and carrying out of the actions set out in the policy letter.	Section 4.03 (b)	Not complied.  No quarterly reports were provided, only monthly monitoring reports in 2013.
<b>Project Implementation and Other Matters</b>		
<b>Program Executing Agency and Implementing Agencies</b> The borrower shall be responsible for the coordination and execution of the program with its various concerned departments and agencies.	Schedule 5, para. 1 (a)	Complied
Without limiting the generality of the foregoing subparagraph, MOF shall be the program executing agency and shall be responsible for the overall implementation of the program, including compliance with all policy actions, facility administration, disbursements and maintenance of records. Furthermore, MOF shall be responsible for day-to-day program implementation activities, and shall report implementation progress and provide guidance and direction to the implementing agencies (IAs). The IAs shall be responsible for carrying out the policy actions.	Schedule 5, para. 1 (b)	Complied
The borrower shall (i) endeavor to ensure that critical program staff shall remain in their position on a full-time basis for a reasonable duration to ensure continuity in the implementation of the program; and (ii) ensure that all IAs will be adequately staffed and provided with the necessary financial, technical, and other resources to perform their functions.	Schedule 5, para. 1 (c)	Partly complied  Due to the merger of PWSC and PPUC several staff left.
<b>Program Steering Committee</b> The PSC shall be formed and shall be chaired by the MOF. The members will include the Minister for MPIIC, the Financial Adviser to the Vice President, the Legal Adviser to the President and the General Manager of the PPUC. The Borrower, with ADB endorsement, may change the membership of the PSC as deemed appropriate during Program implementation. The PSC shall be responsible for overall	Schedule 5, para. 2	Partly complied  The PSC submitted only two reports, in March 2011 and

Covenant	Reference in the Loan Agreement	Status of Compliance
<p>direction, guidance, monitoring, and providing an oversight role for the Program. The PSC shall meet at least every quarter basis to discuss the progress of the Program. The PIU will act as the Secretariat of the PSC.</p>		<p>October 2011. After the merger of PWSC and PPUC in 2013, the Board acted as the PSC. Prior to the merger the PWSC supplied monthly monitoring reports from January–March 2013. After that no further monitoring reports were received.</p>
<p><b>Policy Actions</b> The borrower shall (a) ensure that all policies adopted and actions taken under the program, as set forth in the policy letter and the policy matrix prior to the date of this loan agreement, shall continue to be in effect for and beyond the duration of the program, (b) promptly adopt and implement the policies and actions included in the program as set forth in the policy letter and the policy matrix, and (c) make submissions to ADB on the completion of actions under the policy matrix by reference to the indicators set out in the matrix.</p>	Schedule 5, para.3	Complied
<p><b>Policy Dialogue</b> The borrower shall keep ADB informed of, and the borrower and ADB shall from time to time exchange views on progress made in carrying out the policies and actions set out in the policy letter and the policy matrix and in the formulation and implementation of new related policies.</p>	Schedule 5, para.4	Complied
<p>The borrower and ADB shall promptly discuss problems and constraints encountered during the implementation of the program and appropriate measures to overcome or mitigate such problems and constraints.</p>	Schedule 5, para.5	Complied
<p>The borrower shall keep ADB informed of policy discussions with other multilateral and bilateral aid agencies that may have implications for the implementation of the program and shall provide ADB with an opportunity to comment on any resulting policy proposals. The borrower shall take into account ADB's views before finalizing and implementing any such proposals.</p>	Schedule 5, para 6	Complied
<p><b>Financing Agreement</b> The borrower shall provide financial support to the PWSC during the transition to full cost recovery, which is targeted at the end of FY2014. The borrower and the PWSC shall enter into a financing agreement to financially assist PWSC in implementing the sector reforms, in a form and substance acceptable to ADB. Under the financing agreement, the borrower shall provide financial assistance in the form of a loan of up to \$6 million and a grant of up to \$2.6 million. The execution of the financing agreement shall be a condition to the second tranche release.</p>	Schedule 5, para 7	<p>Complied</p> <p>Due to the merger of PWSC and PPUC, the financing agreement was to PPUC.</p>



Covenant	Reference in the Loan Agreement	Status of Compliance
<b>Counterpart Funds</b> The borrower shall ensure that the counterpart funds are used to finance the local cost relating to the implementation of the program and other activities consistent with the objectives of the program and shall provide the necessary budget appropriation to finance the structural adjustment costs relating to the implementation of reforms under the program. In particular, the borrower shall ensure that the counterpart funds shall be used to (i) develop the water sector legal and policy framework, (ii) establish the PWSC, (iii) provide the PWSC with the necessary financing during the transitional period until it becomes financially autonomous, and (iv) promoting water conservation.	Schedule 5, para 8	Partly Complied.  The PWSC ceased corporatization activities due to Executive Order No. 324 on 30 January 2013. A merger took place between PWSC and PPUC on 6 June 2013.
<b>Program Review</b> The borrower shall undertake periodic reviews during program implementation to evaluate the scope, implementation arrangements, progress and achievement of the program's objectives. In addition to the periodic reviews, a program review shall take place prior to the second tranche release. The borrower shall ensure that ADB shall have the opportunity to participate in these reviews.	Schedule 5, para 9	Complied
<b>Program Performance Monitoring and Evaluation</b> The borrower shall monitor the implementation and outcomes of the program using a set of indicators and targets that has been agreed with ADB to assess progress towards meeting the objectives of the program. For each of the agreed indicators, progress shall be measured against a baseline in FY2010. The responsible IAs shall review the agreed frameworks every three months to determine progress and identify constraints.	Schedule 5, para 10	Partly Complied  No effort has been made to monitor progress or performance in any systematic way.
<b>Records of Accounts and Reporting</b> The borrower shall maintain separate records of account for the program. To ensure proper fund management, ADB retains the right to audit the use of loans proceeds. The accounts shall be managed, operated, and liquidated in accordance with terms satisfactory to ADB. The borrower shall prepare a quarterly consolidated progress report on policy and institutional reforms implementation and will forward the same to ADB at the time of submission to the PSC. The reports shall describe progress made in the program and any changes to the implementation schedule, and will also identify any problems encountered and remedial actions taken. The borrower shall submit a program completion report not later than 3 months after program completion.	Schedule 5, para 11	Partly Complied.  PSC stopped functioning after Executive Order 324. Program Completion Report not submitted

ADB = Asian Development Bank, FY = financial year, MOF = Ministry of Finance, MPIIC = Ministry of Public Infrastructure, Industry and Commerce, PIU = program implementation unit, PPUC = Palau Public Utility Corporation, PSC = program steering committee, PWSC = Palau Water and Sewer Corporation.

Source: Asian Development Bank.

## **FINANCIAL ANALYSIS**

### **A. Summary**

1. The following analysis details the revenues, expenditures, tariffs, and government subsidies of the water and sewerage sector. It takes into account the merger on June 6 2013 of the Palau Water and Sewer Corporation (PWSC) and the Palau Public Utilities Corporation (PPUC) after the Executive Order No. 324 signed by the President on 30 January 2013, when the PWSC was ordered to cease all incorporation activities. House Bill No. 9-4-1 was submitted on 24 January 2013. The final action in the House was May 23 2013 and then the Bill went to the Senate and was passed on May 23 2013. The Bill was signed by the President on 6 June 2013 and entered into law as Republic of Palau Public Law (RPPL) No. 9-4. At appraisal, it was envisaged that full cost recovery would be achieved by FY2014/FY2015 with no government budget support. Due to the merger between the PWSC and the PPUC, there was a change in how cost recovery was to take place.

2. The law stated that the rates set by the PWSC for the water and wastewater operations were to remain in effect and were to be the rates of the PPUC in Koror and Airai states. Water rates for the other outlying states (a total of 14) were to be those of 2011 until such time as the PPUC judged it appropriate for a subsection of the law-enabled future rates to be assessed on the basis of quality and volume of water used. Wastewater rates were to be assessed on the basis of usage. Future rates were to be designed on the basis of achieving full cost recovery, meeting the PPUC's operational costs, and recovering the cost of the PPUC's capital. The 2011 rates are still in use today for the outlying states due to the poor quality of the water in these states. In FY2017 these rates are a flat fee of \$12 for water and \$1.50 for wastewater, the same as the 2011 levels.

3. In effect the PPUC is providing services at subsidized rates for these outlying states but is not violating its primary objective of operating efficiently and sustainably. The government is paying a subsidy to the PPUC for these services, i.e., a community service obligation, due to its providing water at a price below the actual cost of delivery. For Koror and Airai, water and wastewater services are paid for by tariffs that are regularly increased. These two states are covering their costs with the revenues they obtain.

### **B. Recent Financial Performance of the Sector**

4. The Program Completion Review Mission (PCRM) held discussions with the PPUC to obtain details of annual financial data and annual financial projections to forecast sector performance through the end of FY2018. Table 1 shows the data obtained.

**Table 1: Summary Sector Data FY2013-FY2016 and Financial Projections FY2017-FY2018 (\$ million)**

Item	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
<b>Water and Sewerage</b>						
Total revenue	1.900	2.392	3.150	4.756	5.716	5.944
Total operating expenses	5.500	7.175	6.857	6.601	7.096	7.122
Balance	(3.600)	(4.783)	(3.707)	(3.845)	(1.380)	(1.178)

() = negative, FY = financial year

Expenses include depreciation.

Source: Palau Public Utilities Corporation.

### C. Tariffs

5. Throughout the implementation of the program, tariffs have been gradually increased. Table 2 shows the tariff levels for each consumer category.

**Table 2: Tariffs FY2011, FY2014-FY2018 (\$)**

Item	Effective From	FY2011	FY2014	FY2015	FY2016	FY2017	FY2018
<b>Water</b>							
Residential	Below 5,000 gals per month (per 1,000 gals per month)	1.06	1.17	1.47	1.53	1.59	1.65
All others	Above 5,000 gals per month (per 1,000 gals per month)	1.28	1.91	4.51	5.41	6.49	6.75
<b>Sewerage</b>							
Residential	Below 5,000 gals per month (per 1,000 gals per month)	0.30	0.30	0.36	0.38	0.39	0.41
All others	(per 1,000 gals per month)	1.28	2.21	4.13	4.95	5.94	6.18

FY = financial year

Source: Palau Public Utilities Corporation.

### D. Government Subsidies

6. The forecasts show that the annual sector subsidy by the government is reducing. For FY2016 and FY2017, it is expected to be about \$1.2 million, to cover the community service obligation for the outlying states. Table 3 shows recent annual government subsidies to the sector.

**Table 3: Government's Annual Subsidy, FY2011-FY2018**  
**(\$ million)**

Item	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
<b>Water and Sewerage</b>						
Net profit/loss	(3.600)	(4.783)	(3.707)	(3.845)	(1.380)	(1.178)
Total government subsidy	3.600	2.757	3.543	3.687	1.200	1.200
Balance	0.000	(2.026)	(0.164)	0.158	(0.180)	0.022

() = negative, FY = financial year

Source: Palau Public Utilities Corporation

The government subsidy in FY2016 includes the state of emergency drought subsidy

7. It can be seen from Table 3 that the government subsidy has varied from year to year and in some cases has increased, as in FY2016 when a state of emergency due to drought was declared and government funds were input as a subsidy for the drought response. A large part of the government subsidy is for its community service obligation to the outlying 14 states and not for Koror or Airai. The PPUC has to bear any shortfall. In order to do this, it has had to defer paying some debts, e.g., electricity payments. The forecast subsidy for FY2017 and FY2018, is for the community service obligation for provision of water supplies to the outlying states.

### QUANTITATIVE ASSESSMENT OF OVERALL PROJECT PERFORMANCE

Criteria	Assessment	Rating (0–3)	Weight (%)	Weighted Rating
Relevance <sup>a</sup>	Relevant	2	25	0.50
Effectiveness <sup>b</sup>	Effective	2	25	0.50
Efficiency <sup>c</sup>	Less Efficient	1	25	0.25
Sustainability <sup>d</sup>	Likely	2	25	0.50
<b>Overall Rating</b>	<b>Successful</b>			<b>1.75</b>

<sup>a</sup> Project objectives and outputs were relevant to the strategic objectives of the government and the Asian Development Bank.

<sup>b</sup> Project achieved its outcome.

<sup>c</sup> Project achieved objectives in an efficient manner.

<sup>d</sup> Project benefits and development impacts are sustainable.

Source: Asian Development Bank.

Rating Value	Relevance	Effectiveness	Efficiency	Sustainability
3	Highly relevant	Highly effective	Highly efficient	Most likely
2	Relevant	Effective	Efficient	Likely
1	Partly relevant	Less effective	Less efficient	Less likely
0	Irrelevant	Ineffective	Inefficient	Unlikely
Rating:	Greater than 2.7	=	Highly successful	
	Between 1.6 and 2.7	=	Successful	
	Between 0.8 and 1.59	=	Partly successful	
	Less than 0.8	=	Unsuccessful	

Source: Asian Development Bank.