Fiji: Urban Water Supply and Wastewater Management Investment Program

**Project Name**
Urban Water Supply and Wastewater Management Investment Program

**Project Number**
49001-002

**Country**
Fiji

**Project Status**
Active

**Project Type / Modality of Assistance**
Grant Loan

**Source of Funding / Amount**
MFF Facility Concept 0097-FIJ: Urban Water Supply and Wastewater Management Investment Program

| Ordinary capital resources | US$ 153.20 million |

**Strategic Agendas**
Environmentally sustainable growth
Inclusive economic growth

**Drivers of Change**
Governance and capacity development
Knowledge solutions
Partnerships
Private sector development

**Sector / Subsector**
Water and other urban infrastructure and services - Urban sewerage - Urban water supply

**Gender Equity and Mainstreaming**
Effective gender mainstreaming

**Description**
The impact of the proposed investment program will ensure future growth in the greater Suva area (GSA) is sustainable and will improve public health. The outcome will be improved access to sustainable water supply and sewerage services in the GSA. The investment program has three outputs:

Output 1: Supply and access to safe water in the GSA improved. The investment will expand water supply by 40,000 m³ per day by constructing a new supply intake on the Rewa river with associated water treatment plant, pumping station, reservoir, and transmission main to connect to the existing system. Reliable and sustainable long term operations and maintenance practices will be enhanced through a Design-Build-Operate (DBO) contracting arrangement. A catchment management plan will be developed to safeguard the water source and ensure long term sustainability. Non-revenue water (NRW) reduction will be achieved by improving leak detection and repairs; replacing meters; and establishing district metering areas and pressure management systems. Water Authority of Fiji (WAF) will supply 200 liters per capita per day to 315,947 persons by 2023, ensuring continuous supply to 98% of the GSA population. The climate change component of Output 1 will include adaptation measures for building the new Rewa river scheme specifically moving the facility from 29 km to 49 km from the river mouth to avoid future climate change impacts embodied in projected rising sea levels and potential migration of the salt water wedge up the river.

Output 2: Wastewater treatment (WWT) and management capacity in the GSA increased. The wastewater network will be rehabilitated and expanded by: (i) upgrading 31 existing wastewater pumping stations; (ii) upgrading about 18 km of wastewater trunk mains to increase carrying capacity; (iii) relining 13 km of wastewater trunk mains; and (iv) extending the wastewater network to serve an additional 15% of households (approximately 4,500 existing lots in backlog areas) currently using septic tanks. Additionally, the WWT capacity at Kinoya will be expanded by 164% to cover approximately 277,000 person equivalent to treat wastewater from current and future households. By improving the network and expanding the WWT capacity, WAF will ensure that 60% of households in the GSA will have access to a reticulated sewage collection system by 2023. The remaining households with individual septic units will be catered by a fecal sludge management system.

Output 3: WAF management and sustainable service delivery capacity improved. Program management and capacity development support will be provided to: (i) support WAF in the implementation of water demand management, NRW reduction and the national liquid trade waste management programs; (ii) support the Department of Environment (DOE) developing the environmental regulatory framework for treated municipal wastewater discharge, sludge treatment and disposal practices and standards, and associated monitoring and enforcement; (iii) complete the corporatization of WAF; (iv) formulate water safety plans to protect the quantity and quality of water at all source intakes; (v) improve financial management; (vi) promote gender equity; and (vii) study alternatives to reduce the long term energy consumption of the existing urban WWT system.

**Project Rationale and Linkage to Country/Regional Strategy**
Fiji has a population of approximately 868,000, of which 53% is urban. By 2030, it is estimated that two in three Fijians will be living in the country’s urban centres. While poverty rates in Fiji are highest in rural areas, the rapid growth of peri-urban squatter settlements implies that the majority of poor people in Fiji now live in and around urban areas. Fijian urban sectors accounts for 60% of the country’s gross domestic product, with the share of the GSA estimated at 40%. The GSA, which consists of Suva City the national capital as well as the towns of Lami, Nasinu, and Nausori and their surrounding peri-urban areas, accounts for 57% of Fiji’s urban population. By 2023, the population of the GSA is expected to grow by 12.8%. Despite the economic importance of the country’s cities and towns, investment in urban water supply and sewerage services has not kept pace with the demands of rapid urban growth. In the GSA, WAF’s treated water production capacity is insufficient to meet customer demands and there is strong dependence on a single river source that is increasingly vulnerable to drought. To assimilate the forecast population growth, a significant increase in water supply production capacity is required in combination with measures to curb relatively high customer demands and reduce system leakages. Diversification of raw water sources and catchment protection are strategies to improve water security and mitigate the impacts of future climate change. Currently, 36% of urban households are connected to the sewerage system. The Kinoya wastewater treatment plant (WWTp) is under capacity and under-performs in terms of environmental compliance. In the unsewered areas, 60% of households in the GSA currently use on site sanitation systems (e.g. septic tanks). Due to prevailing shallow soil depths, high rainfall and lack of routine maintenance, overflows from septic tanks are a common occurrence which contributes to pollution to receiving waters and public health risks. The current extent of sewerage services coverage and limited wastewater treatment capacity are major constraints to further growth and urban development. The investments to be financed by the program are aligned to the National Development Plan 2016-2033 (medium-term water supply and sanitation sector development plan 2016-2023), WAF GSA Water and Wastewater Master Plan 2013-2033 and the WAF 2016 corporate plan (draft).

Fiji’s National Development Plan 2016-2033 is aligned to the Sustainable Development Goals, and has prioritized the improvement of water and sanitation services in Fiji’s as a core pillar for inclusive economic development and growth. The government’s strategy is to ensure the provision of safe drinking water and basic sanitation to every household in Fiji. In addition the National Development Plan acknowledges increased population growth, water consumption and climate change impacts as an impediment to efforts to achieving sustainable development.

**Impact**
The impact will be sustainable urban growth and improved public health in the greater Suva area.
Description of Outcome
Access to sustainable water supply and sewerage services in GSA improved

Progress Toward Outcome

Implementation Progress

Description of Project Outputs
Supply and access to safe water in the GSA improved
Wastewater treatment and management capacity in the GSA increased
WAF management and sustainable service delivery capacity improved

Status of Implementation Progress (Outputs, Activities, and Issues)

Geographical Location
Nation-wide

Safeguard Categories

Environment B
Involuntary Resettlement B
Indigenous Peoples C

Summary of Environmental and Social Aspects

Environmental Aspects
Involuntary Resettlement
Indigenous Peoples

Stakeholder Communication, Participation, and Consultation

During Project Design

During Project Implementation

Responsible ADB Officer
Katich, Kristina N.

Responsible ADB Department
Pacific Department

Responsible ADB Division
Pacific Subregional Office in Suva, Fiji

Executing Agencies
Ministry of Economy
Level 5x Ro Lalabalavu House
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Timetable

Concept Clearance 01 Mar 2016
MRM 15 Sep 2016
Approval 09 Dec 2016
Last Review Mission -
Last PDS Update 08 Nov 2018

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<th>Financing Plan</th>
<th>Loan Utilization</th>
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<tr>
<td>Total (Amount in US$ million)</td>
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