Project Information Document/ Integrated Safeguards Data Sheet (PID/ISDS)

Concept Stage | Date Prepared/Updated: 27-May-2018 | Report No: PIDISDSC24841

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
Solomon Islands	P165872		Urban Water Supply and Sanitation Sector Project (P165872)
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
EAST ASIA AND PACIFIC	Nov 12, 2018	Mar 20, 2019	Water
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Ministry of Finance and Treasury	Solomon Islands Water Authority	

Proposed Development Objective(s)

The proposed PDO is to increase access and quality of water supply and sanitation services in Honiara and selected provincial capitals, and to improve the operational performance of Solomon Water.

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	58.85
Total Financing	58.85
of which IBRD/IDA	15.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	15.00
IDA Credit	15.00

Non-World Bank Group Financing

Counterpart Funding	2.50
Borrower	2.50
Other Sources	41.35

Asian Development Bank	20.00
EC: European Development Fund (EDF)	21.35

Environmental Assessment Category	Concept Review Decision
B - Partial Assessment	

Have the Safeguards oversight and clearance functions been transferred to the Practice Manager? (Will not be disclosed)
No

Other Decision (as needed)

B. Introduction and Context

➢ Country Context

1. Solomon Islands' geography presents significant challenges to services delivery, infrastructure, and economic integration. The total population of Solomon Islands, estimated at 600,000 in 2016, is distributed amongst an archipelago of more than 300 inhabited islands spread over some 1.34 million km^2. The country has among the lowest population densities (18 persons/km^2) and urbanization rates (22 percent) in the world. With an annual urban growth rate of 4.7 percent, it is projected that by 2030, about 30 percent of the country's population will be living in urban areas if the present trend continues. Greater Honiara, the country's only significant urban center, was home in 2017 to about 105,000 people, a figure expected to surpass 300,000 within the next 30 years largely due to internal migrations. Other urban centers (e.g. Auki, Gizo, Noro) do not exceed 8,000 inhabitants. According to the last available Household Income and Expenditure Survey (HIES), 12.7 percent of the population lived under the national basic needs[1] poverty line in 2013 (9.1 percent in urban areas).

2. The country was affected between 1998 and 2003 by a civil conflict spurred by grievances between Greater Honiara landowners and migrants drawn by economic opportunities. Its multiple political and economic causes included the disproportionate concentration of economic development in and around Honiara compared to the rest of the country, and rapid social changes associated with increasing urbanization, leading to disenchantment among youth and a loss of social cohesion. While institutions have since then been re-built, their capacity remains for the most part very limited.

3. Since the end of the conflict, Solomon Islands has experienced significant economic growth, driven mainly by logging (although at an unsustainable rate), services (with boosted public sector and international community spending in the

[1] Defined in reference to the absolute minimum resources necessary for long-term physical well-being, usually in terms of consumption goods

post-conflict context), and agriculture (copra and palm oil production). However, economic development has been largely diluted across a fast-increasing population base (over 2% per year in the past fifteen years) and the per capita gross domestic product (GDP) of US$2,070 per capita, when adjusted for inflation, remains lower today than it was before the conflict. Offering opportunities for cash employment, access to higher education and specialized social services unavailable elsewhere in Solomon Islands, Honiara has witnessed over the past decade the burgeoning of informal settlements[2]. While population growth in Honiara represents currently 3 percent per annum, population in informal settlements is estimated to be growing by more than 6 percent per annum.[3] Peri-urban households around the capital Honiara suffer from disproportionate levels of poverty, with up to 25 percent of their population below the basic needs poverty line (12.5 percent nation-wide in 2013).

➢ Sectoral and Institutional Context

• *Sector Context*

4. *Access to safely managed water supply services.* Per recent data (WHO/UNICEF JMP, 2017), 90 percent of the urban population has access to a basic water supply service[4] (79 percent in informal settlements[5] and 56 percent in rural areas). Honiara and the country's largest towns, Auki, Noro, and Tulagi, have reticulated water supply systems, which cover about 55 percent of their population (8,500 connections) and is operated by the national water utility, Solomon Islands Water Authority, trading as Solomon Water (SW). SW is also expected to take over the supply to Gizo, where past local government initiatives to provide a reliable long-term water supply have failed and population resorts almost exclusively to rainwater harvesting. Overall, SW customers experienced in 2015 quasi continuous water supply services with average 23 hours of service per day (up from eight hours per day in 2010) and an average residential consumption of 144 liters per capita per days in 2017. That same year, only 75 percent of tested water samples met national standards for residual chlorine. Moreover, most bores (and to a lesser extent spring sources) are vulnerable to contamination from human and solid waste, particularly from informal settlements, which typically lack formal drainage or sewerage / septic systems. Urban centers such as Tulagi and Auki do not have any water treatment system. In informal settlements, SW is currently piloting various service delivery models, including for example pre-paid metering systems or community-based management of water distribution.

5. In urban communities not served by SW (e.g. in informal settlements on the fringes of Honiara city limits), households rely primarily on individual or collective household rainwater tanks, shallow wells and occasionally on surface water. Sanitation facilities mainly consist of shared toilets and on-site unimproved sanitation systems such as hand-dug pit

[2] Informal or unplanned residential areas that have developed outside of the formal urban planning rules of a city, often physically located in marginal or peri-urban areas and that are not recognized by government agencies. They are characterized by uncertain or illegal land tenure, minimal or no access to public services (such as water supply, sanitation, electricity, and roads) and high presence of informal employment and low-income population.
[3] World Bank, 2015. Unsettled: Water and Sanitation in Urban Settlement Communities of the Pacific. The World Bank Group. Washington, D.C.
[4] A household has access to basic water supply service when an improved water source is available with a collection time that is no more than 30 minutes for a roundtrip, including queuing. Improved water sources are those that are potentially capable of delivering safe water by nature of their design and construction. These include piped water, boreholes or tubewells, protected dug wells, protected springs, and rainwater. (SDG definition)
[5] Solomon Water, 2017. 30 Year Strategic Plan

latrines. Rivers are often used for laundry, bathing, and open defecation, to which about 9 percent of urban population resort regularly. Diarrheal diseases are the sixth most common cause of deaths in Solomon Islands, accounting for four percent of deaths.[6] A study conducted between 2008 and 2012 found more than 8 percent of children underweight.[7] The link between diarrhea and child undernutrition and other enteric infections has been documented. Environmental enteric dysfunction, a gut disorder caused in part by chronic ingestion of pathogenic microorganisms, is hypothesized to be the primary causal pathway between poor water supply, sanitation and hygiene, and child growth (Humphrey 2009).

6. *Water availability*. On the larger islands such as those where SW operates, surface water from springs or rivers is the main source of drinking water, and is often complemented with groundwater. In Honiara, the reticulated system draws from various springs, small rivers and bores, with a production capacity of 32.5 million liters per day (MLD). The current demand, in conjunction with physical losses in the network, exceeds SW's water production capacity by 8.5 MLD. Even with a major reduction of physical losses and a slight decrease in per capita consumption, the gap that could reach 50 MLD in 2040 as population grows and networks expand to urban areas. The development of water production capacity on the Lungga river, about five kilometers south of Honiara, has been identified as the best option to address this supply gap.[8] Other considered options included desalination and more distant surface water sources, which would not be cost-competitive. While water production capacity is about sufficient to meet average water demand in the urban centers of Auki, Noro and Tulagi, shortages are frequent during the dry season. The water production gap exceeds two thirds of the demand in Gizo, where a detailed review of supply augmentation options remains to be carried out.

7. *Climate change*. Current climate change projections are expected to have negative impacts on water and sanitation services and infrastructure and include: warmer overall climate and more extremely hot days; increases in rainfall variability – both annual and seasonal; more frequent and more intense extreme rainfall events, which may lead to flash floods and landslides; rising sea levels (see also paragraph 34); and, potentially more frequent or more intense droughts.[9] In 2014, flooding was assessed to have caused US$4.5 million of damage and economic loss in the water and sanitation sector, and the costs of recovery in this sector were estimated to be $5.24 million.[10] The 1997 and 1998 droughts are estimated to have reduced the availability of freshwater in Honiara by around 30-40 percent, damaging crops and negatively affecting livelihoods. Rainwater harvesting, increasingly utilized by households not supplied by SW, is unsecure due to projected impacts such as seasonal, and increasingly unpredictable changes, in rainfall patterns as well as more frequent droughts.

8. *Access to improved sanitation and quality of sewerage services*. Currently 76 percent of urban households have access to basic sanitation[11] (18 percent in rural areas, where open defecation is reported as 50 percent).[12] The remaining population use shared sanitation facilities and onsite unimproved sanitation systems.[13] Honiara is the only sewered urban

[6] ADB. 2016. Strengthening Urban Infrastructure Investment Planning in the Pacific. Manila (TA9181-REG).
[7] UNICEF, 2013. Solomon Islands Statistics.
[8] Solomon Water, 2017
[9] CLIMsystems. 2017. Climate Change Impact for Honiara, Solomon Islands (report prepared for ADB).
[10] Government of Solomon Islands, 2014. Rapid Assessment of the Macro and Sectoral Impacts of Flash Floods in the Solomon Islands.
[11] A household has access to basic sanitation services when it uses sanitation facilities designed to hygienically separate excreta from human contact, and are not shared with other households. This includes flush/pour flush to piped sewer system, septic tanks or pit latrines, ventilated improved pit latrines, composting toilets or pit latrines with slabs.
[12] WHO/UNICEF JMP, 2017
[13] Including here public or shared latrines and pit latrines without a slab or platform.

area, with about 6 percent of the population currently connected to a system built in the 1970's and subject to repeated breakdowns, surcharge and overflows (20 blockages per km of sewer in 2017). Sewage from this system, managed by SW, is discharged without treatment (except for a few poorly maintained communal septic tanks) through ocean and river outfalls, most of which have been broken during previous storms and are discharging near the shoreline. Sludge generated from communal and household septic tanks is managed by Honiara City Council or by the private sector, and transported near Lungga River to a landfill disposal site that does not meet sanitary confinement requirements (when it is not illegally dumped elsewhere). Households that are not connected to the sewerage system typically rely on private flush toilets connected to septic tanks (or pit latrines commonly in informal areas), which are often inadequate to prevent groundwater pollution. Flooding, common on the larger islands such as those where Honiara and Auki are located, can be a major health hazard. For example, in 2015 a flash flood event in Honiara triggered more than 4,200 cases of diarrhea (notably among children), which ultimately turned into a nation-wide epidemic.[14]

9. *Efficiency of water supply and sanitation services and financial viability.* Investment in recurrent and preventative maintenance and capital works programs has historically been low due to inadequate revenue and funding, which has resulted in the deterioration of SW's water and sewerage networks. Non-revenue water was estimated in 2015 to exceed 60 percent in Honiara and 50 percent in other urban centers, two thirds overall being attributed to physical losses. Ninety-three percent of water customers are metered. Collection ratio fluctuates between 84 percent and 100 percent over the years, and the company's cost coverage ratio reached 1.37 in 2017 nation-wide, thanks to a proactive debt collection policy, especially from SW's largest Solomon Islands Government (SIG) and commercial customers which generate more than half of SW's revenues.[15] Overall, the financial position of SW has improved significantly in recent years from an operating loss of US$4.0 million in 2010 to a surplus of about US$2.0 million in 2017. In 2018, even though Australia Department of Finance and Trade (DFAT) is stopping its financial support for SW management staffing, SW is still projecting an operating surplus of about US$0.5 million.

10. *Gender aspects*. The impact of poor water and sanitation services falls disproportionately on women, who bear responsibility for all household water and sanitation related tasks such as cleaning, cooking, washing, caring for children and the sick. In areas unserved by SW (mostly informal settlements), the burden on women can also include physical labor required to collect water from water sources and carry water home. The risk of sexual and physical violence from collecting water or defecating away from home late at night or in the early morning is real. Men are the main decision makers and influencers in the household, in settlement community leadership, and in local government.[16]

11. *Affordability of WSS services.* The current tariff for the first tranche (below 15 m^3 per month) is US$0.76 per m^3 for water services, and US$0.38 per m^3 for sewerage services. According to on a 2016 survey,[17] 86 percent of both formal and informal households are willing to pay for improvements to piped water, including better water quality, reliability and access. However, 61 percent of these households think the cost of water from SW is too high. The average monthly water bill equals 16.9 percent of the average income for informal households, 10.9 percent for low income households and 6.1

[14] Jones, Forrest Kirby, 2015. "Widespread Dissemination Of Diarrhea Due To Rotavirus Serotype G9p8 In The Solomon Islands After A Focal Flood-Related Outbreak". *Public Health Theses*. 1143.
[15] Tennant, Stacey and Kearton, Ross. Independent evaluation of Phase 2 of the Australian Aid Program's urban water program in Solomon Islands. 2016
[16] World Bank, 2015
[17] E. Heslop, 2016. Social and Consumer Assessment

percent for average income households. This is up to three times higher than the estimated affordability threshold of 3-5 percent of total income.[18]

- *Institutional context*

12. *Accountability framework.* The Ministry of Energy, Mines and Rural Electrification (MEMRE) plays a policy and planning role with regards to the urban water sector. It oversees the implementation of the National Water and Sanitation Sector Plan (NWSSP), which was adopted by the government in 2013 and lays out a ten-year plan to implement the goals and objectives of the National Development Strategy 2011-2020 and other Government initiatives and strategies, including the National Infrastructure Investment Plan. The Ministry of Health and Medical Services is responsible of setting water quality standards and the Ministry of Environment, Climate Change, Disaster Management, Conservation and Meteorology for permitting and environmental monitoring of water abstraction and pollution discharges to water bodies. SW is a state-owned enterprise (SOE) responsible for delivering water supply and sewerage services on a commercial basis in Honiara, Auki, Noro and Tulagi,[19] and soon Gizo. SW's Board reports to MEMRE and to the Minister of Finance and Treasury (MFT). Collection and disposal of municipal solid waste and septage removal are under the responsibility of the Honiara City Council (HCC) and of respective councils in other urban centers.

13. *Sector financing.* MFT submits to Parliament fees and charges proposed by SW's Board on a case-by-case basis, since there is no regulation guiding their formulation and periodic revision. As indicated above, in recent years SW has recovered its operating costs in Honiara from charges to consumers, and has also been able to reinvest part of its generated revenues. SW is also entitled to receive Community Service Obligation (CSO) payments from the Solomon Islands Government (SIG) to cover losses specifically related to operations outside of Honiara. However, CSOs have not been provided since 2015 and operation of these services currently represents a significant drain to SW's finances. Larger infrastructure investments remain dependent on public and donor financing.

14. *SW institutional strengthening.* Historically, financial management of SW has been poor, reaching a state of near financial and operational collapse in 2010. Due to weak governance by the previous Board, poor management with limited skills, and inappropriately low tariffs, SW was unable to pay its electricity bills and accumulated a substantial debt to the Solomon Islands electricity utility. At mid-2010, SIG initiated a series of reforms to strengthen SW, which began with the replacement of the Board, the appointment of donor-funded General Manager and Finance and Administration Manager, and the preparation of a Short-Term Recovery Strategy (2011-2013) and subsequently a Two-Year Plan (2013-2015) to guide urgent reforms to SW's organization, finances and operations. Since then, the quality of water services has significantly improved in terms of quality of supplied water and continuity of service. SW's operational capacity and performance have also improved markedly in areas such as metering, billing and collections, non-revenue water (NRW), asset management and operating profits. In view of major upcoming challenges, including major service expansion and improvement needs in a context of rapid urban growth, SW has prepared a 30 Year Strategic Plan and a 5-year Action Plan (2017), which identify a number of high priority projects and define clear performance targets. Both plans have been

[18] Solomon Water, 2017. 30 Year Strategic Plan

[19] SW area of operations officially includes the island of Guadalcanal, where Honiara is located, and nine urban centers. SW's activities currently focus on Honiara and three of these urban centers (Auki, Noro, Telagi). Taking over ownership and management of services in other areas, such as Gizo, is possible under mutual agreement with the Solomon Islands Government and the respective provincial governments.

endorsed by the Government. Initial project preparation work is being undertaken through a technical assistance (TA) project provided by the Asian Development Bank (ADB) to fund the implementation of the five-year Action Plan.

15. *Donors' involvement in the sector.* Two main donors have supported the urban water sector in Solomon Islands. The Australian Aid (now the Department of Foreign Aid and Trade, DFAT) played a critical role in the SW recovery efforts undertaken in 2011, contributing in 2013 and 2014 to approximately 86 percent of SW's operational budget.[20] Its assistance focused primarily on improving levels of service in Honiara and reducing NRW. Funding was geared towards the implementation of the Short-Term Recovery Strategy and the Two-Year Plan, the financing of SW management positions, some fleet and plant, and the set-up of the billing system, under various technical assistance packages. In parallel, the Japanese International Cooperation Agency (JICA) financed water infrastructure investments (US$16 million) in Honiara and Auki in the early 2010's and provided in parallel a *Non-Revenue Water Reduction Technical Cooperation Project* aiming to increase SW's capacity to reduce NRW. Additionally, the European Union has allocated Euro 18 million to the urban water sector, to be used over five years starting in 2018, and UNDP has been financing between 2014 and 2018 a Solomon Islands Water Sector Adaptation Project (SIWSAP) to increase the capacity of targeted communities (including Gizo) to adapt to climate change impacts on water resources.

➢ Relationship to CPF

16. The proposed project will contribute to the achievement of higher level development objectives of SIG and the Bank. SIG's long-term development vision, the National Development Strategy 2016 to 2035 (NDS), establishes as its Goal 3 that all Solomon Islanders should have access to quality social services, including education and health. The Medium-Term Development Plan 2016-2020, translating the NDS long-term development objectives into operational priorities, aims through its medium-term strategy 3 to "build and upgrade physical infrastructure and utilities, and to ensure all Solomon Islanders have access to essential services", and, through its medium-term strategy 5, to "alleviate poverty, improve provision of basic needs and increase food security".

17. SIG and the Bank have initiated the preparation of a new CPF for the period 2018-2023 (P165093)[21] and consultations with stakeholders are underway. Under the Focus Area 1 (Strengthening the Foundations of Well-being), the proposed Objective 1.1 is to improve access to climate resilient infrastructure and services. In that perspective, the CPF commits Bank's support to SIG in implementing SW's Five-year Action Plan, which aligns with SIG's vision for the sector as outlined in the NDS, and which will focus on the extension of water supply and sewerage systems in Honiara and other urban centers. Support for improved water and sanitation services is a core contribution to Bank's twin goals of eliminating extreme poverty and boosting shared prosperity, by (i) reducing the time and effort—especially of women and children—to collect water, (ii) reducing the incidence of waterborne diseases caused by contact with contaminated water, (iii) reducing absenteeism from work and school and the costs associated with these, including lost income and opportunities, and (iv) contributing to reducing malnutrition and stunting. Poor access to water, sanitation and hygiene is one of the underlying causes of all these limiting factors to development.

[20] Solomon Islands WaSH Sector Analysis, Water Aid, 2016
[21] Report 122600-SB from February 7, 2018

C. Proposed Development Objective(s)

➢ Proposed Development Objective(s)

The proposed PDO is to increase access and quality of water supply and sanitation services in Honiara and selected provincial capitals, and to improve the operational performance of Solomon Water.

➢ Key Results

- People provided with access to improved water sources through piped household water connections (male/female)*
- People provided with access to improved sanitation service (male/female)*
- Samples testing meeting national water quality standards at distribution points (%)
- Volume of wastewater collected disposed of in accordance with national environmental standards (%)
- Non-revenue water (%)*

* corporate results indicator

D. Concept Description

18. **Government's long-term vision and project focus.** The proposed Urban Water Supply and Sanitation Sector Project (UWSSSP) will support SIG's efforts to achieve SDG6.1[22] and SDG6.2[23] by financing the necessary infrastructure investments and strengthening Solomon Water's capacity to operate this infrastructure in an efficient manner. It will focus on improving access to safe water and improved sanitation in urban and peri-urban areas of Solomon Islands and strengthening the water and sewerage services provider SW to improve the sustainability of services. The project scope will contribute to SW's Five-Year Action Plan, which aims to achieve a number of corporate and service priorities, such as:

Indicator	Progress (2017)	Five-year action plan target
Water service coverage (% of population in service area)	55%	70%
Water quality (% of samples compliant with required guidelines)	48%	95%
Wastewater service coverage (% of population in service area)	9%	20%
Sewage treatment	No treatment	All sewage screened, diluted at discharge
Non-revenue water	62%	45%
Collection period (average days for collection)	146	90
Staff per 1,000 connections	18	12

19. The proposed project also seeks to address the vulnerability of key water and wastewater assets to extreme weather events and climate change, as this is one of the key future challenges for SW. It will seek to cooperate and coordinate with other government and development partners, aiming towards jointly providing comprehensive and aligned support to the sector. The project will mainly focus on Honiara where the bulk of urban water supply and sanitation (WSS) improvement

[22] By 2030, achieve universal and equitable access to safe drinking water for all
[23] By 2030, achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

needs is concentrated. However, it will also support SW's provincial capitals of Tulagi, Noro, Auki and Noro and its expansion to Gizo, where WSS-related needs are particularly dire.

20. **Project Cost, Financing, Duration and Beneficiaries.** The estimated total project cost is US$58.85 million, jointly co-financed by an IDA Credit (US$15.00 million), an Asian Development Bank (ADB) grant (US$10.00 million), an ADB loan (US$10.00 million) and a European Development Fund (EDF) grant (US$21.35 million) to be channeled by ADB, and a Borrower contribution (US$2.50 million). All project costs are to be covered by the respective donors proportionally to their overall financial contributions. The use of Borrower contribution will be clarified during project preparation. The project will be implemented over a period of eight years to allow sufficient time for successful achievement of the PDOs. The lending instrument for the proposed Project is Investment Project Financing (IPF). Selection of the IPF structure was based on the IPF's flexibility and suitability to incorporate financing for a broad range of activities, including several specific investments, technical assistance, and capacity enhancement measures. The Recipient will be the SIG for the full IDA amount. Much of Honiara population (about 106,000), in addition to dwellers of other provincial capitals such as Auki (6,200), Gizo (6,100), Noro (4,000) and Tulagi (1,400), are expected to benefit from improved water and sanitation services through the project.

21. **Project Components.** To achieve the Project Development Objectives (PDOs), the proposed project will have the following four components:

Component 1. Urban Water Supply System (US$34 million)

22. This component will aim to improve access and quality of safe water supply services in Honiara and selected provincial capitals. The activities include (i) increasing SW water production capacity in Honiara by up to 12,500 m^3 per day through improvements to existing water sources including the rehabilitation, replacement, or expansion of bore fields and water treatment facilities, to ensure full compliance with drinking water guidelines across the city and to meet water demand until 2027, in the perspective of Lungga water production system implementation (see paragraph 32); (ii) improving the delivery of water through the supply network by (a) augmenting and replacing critical watermains within the water supply networks, (b) increasing treated water storage capacity by about 12 million liters to eliminate daily shortages during peak hour demand, and (c) implementing a leak detection and repair program to reduce NRW from 62% to 45%; (iii) installing bulk supply metering and expansion of SW's customer meter replacement program to achieve 95% metering; (iv) expanding SW's water supply networks to an additional 12,000 people in unserved areas in Honiara; and (v) rehabilitation and expansion of water supply systems in selected provincial capitals.

23. All five subcomponents will either *directly* address the increasing water stress in Solomon Islands' urban areas—by increasing current supplies of adequately treated water—or *indirectly*, by increasing the efficiency in delivering water and reducing NRW losses. They will therefore enhance the Solomon Islands' resilience to climate change and also deliver energy savings through improved efficiency of service delivery. In some cases, for simple works, such as pipelaying, SW may carry out the work (on its own funds) while the project would supply the goods.

Component 2. Urban Sanitation Services (US$10 million)

24. This component will aim to improve access, quality and efficiency of sewerage services in Honiara. The activities include: (a) rehabilitation of at least five existing sewer outfalls to minimize environmental impacts along Honiara seashore; (b) installation of seven kilometers of sewers to rehabilitate and expand the Honiara sewer system to about

9,000 new people; (c) rehabilitation of two sewage pumping stations; (d) preparation and implementation of septage management regulations; and (e) construction of a septage treatment facility to service the greater Honiara area. As under Component 1 works, SW will carry out pipelaying activities, while the project will supply related goods.

Component 3. Hygiene Awareness and Education (US$2 million)

25. The component will enhance awareness of hygiene and water issues and sustained improved sanitation behavior change. Activities will include the design and implementation of sanitation and hygiene awareness and behavior change communication programs to foster handwashing, reduce open defecation and encourage connection to sewerage systems. Awareness activities will also focus on water supply issues, including water conservation and the importance of paying water bills.

Component 4. Institutional Strengthening and Project Management (US$13 million)

26. The component will aim to improve SW's financial, technical and operational sustainability. The activities are expected to include: (a) preparation and implementation of priority corporate policies including demand management, asset management, climate adaptation planning, etc.; (b) strengthening of financial and technical data management including hydraulic modelling and SCADA integration; (c) project management; (d) capacity building, targeting primarily mid-management and operational staff in areas such as non-revenue water, preventive maintenance, demand management, data management; (e) technical assistance at sector level, such as on economic regulation; and (f) implementation of a new administrative building and depot.

Other project features.

27. **Other funding contributions.** ADB is currently preparing a proposal to the Green Climate Funds (GCF) to secure an additional grant (US$33 million) that will help fund additional investments identified in SW's five-year Strategic Plan. The main focus will be on the development of a new surface water source on the Lungga River, with associated water treatment, and raw and treated water transmission infrastructure. ADB is targeting an early 2019 submission date to GCF Board. However, with the dissolution of the Solomon Islands Parliament planned for early December 2018 (in the lead up to the general election scheduled for early 2019), UWSSSP negotiations would need to take place end of November 2018 at the latest. It is therefore proposed to appraise and negotiate the project based on Bank, ADB and EDF financing (to be approved in February 2019), and to process GCF financing in 2019 as project additional financing. This will require a level 2 restructuring of the project Financing Agreement on Bank side, to reflect *inter alia* a modification in the project result framework and in donors' financing contributions by component. ABD's Pacific Private Sector Development Initiative (PSDI) is currently assessing the opportunity to attract commercial financing to also contribute to the funding of the Lungga production scheme water treatment plant (e.g. through a build-operate-transfer, BOT scheme).

28. **Collaboration with donor partners.** The proposed joint co-financing with ADB (including with EU funding) will significantly expand the scale of intervention across various project components. Given the limited institutional capacity at all levels, the implementation agency would likely be overwhelmed by the use of different sets of procurement and safeguards policies and procedures. To address this potential issue, ADB will act as lead joint co-financier during project implementation in line with its role as leading financial contributor to the project. The Bank and ADB will prepare a common approach and framework to address each donor's respective environmental and social requirements, as well as financial management and disbursement arrangements. To facilitate project management, only one donor's procurement

procedures will be utilized during implementation, and the Bank will use the Alternative Procurement Arrangements policy to allow for the application of ABD's procurement procedures during implementation. The Bank and ADB will prepare a Memorandum of Understanding (MoU) defining how both agencies shall respond to issues during implementation, including technical, procurement, financial management and safeguards aspects of UWSSSP. Agreement to ensure the prompt delivery and exchange of information regarding the Project and, when practical, to field joint missions during implementation will be key to ensure smooth project implementation.

29. **Citizen engagement.** The project will benefit all the population living in the urban areas of Honiara and provincial capitals, in particular those who previously had access to unimproved water sources and sanitation, and those who had access to unsafe and unreliable piped water services. To optimize the potential benefit of the project, citizen engagement through consultation will be conducted to ensure that specific needs of men, women and children are addressed in the project. Consultation through public forum and/or focus group discussion is planned to be conducted before the infrastructure is put in place to identify the optimal layout of the water and sewerage networks. Feedback about service quality will also be collected during different stages of project implementation through focus group discussion to better serve the population. The project's awareness and education program component will include the training of local Civil Society Organizations (CSOs) to lead the program, including spreading messages on good hygiene, household water treatment and safe storage and sanitation practices. The project will also provide employment opportunities for skilled and unskilled workers during implementation. As part of Component 4, the project will support the development of SW's capacity and systems in the area of customer relationship, which will include the set-up of a grievance collection and redress mechanism, building on any SW's existing feedback and complaints system.

30. **Gender Mainstreaming**. A gender analysis will be conducted as part of ADB PPA[24] (and reviewed jointly with Bank team), identifying gender gaps relevant for the project components and proposing actions to mitigate the gaps. Women play a limited role in decision making in public affairs, have a proportionally much lower rate of employment than men, and female-led households are over-represented in the lowest three expenditure deciles. Gender based violence is among the highest in the world. In the household, women who bear responsibility for all household water and sanitation related tasks such as cleaning, cooking, washing, caring for children and the sick. A complementary analysis and action plan will be developed to cover activities supported by the other project components.

31. **Climate Change:** The Solomon Islands Water Sector Adaptation Project (SIWSAP) in its work in Gizo has identified key priority areas that matter most to the nation's water resources and sanitation services, among which the impacts of sea level rise on saltwater intrusion into groundwater aquifers or river channels were highlighted. A full literature review including an analysis of outputs from the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) database and the Solomon Island Government's climate change adaptation policies, will be undertaken before project appraisal as part of ADB PPA to review all potential climate change impacts on water supply and sanitation in Honiara and other urban centers. GHG accounting will be conducted during preparation, building on the calculations carried out by ADB as part of its GCF proposal preparation. Significant reductions in GHG emissions are expected to result from the restructuring of the water system production and pumping scheme, improvements in plants' energy efficiency and in the reduction of physical losses. Climate adaptation aspects will be built into infrastructure designs, aiming for example to reduce the vulnerability of key water and sanitation assets to sea-level rise and to flash floods, and increase the resilience of water production systems to intensifying droughts.

[24] Urban Water Supply and Sanitation Development Sector Project, Transactional Technical Assistance for Project Preparation

32. **Maximizing Financed for Development.** Given the emerging state of SW, it appears premature to consider any type of commercial loan or bond to support the infrastructure investment program. The exploration of a potential BOT for water treatment is just commencing and the viability of such model remains to be confirmed. Nevertheless, the proposed investments and technical and financial improvements will help improve the overall financial position of SW and, in time, could make private sector financial participation more viable: the expansion of water and sanitation services will, once completed, increase the revenue base of SW; the improvements supported under component 4 will enhance the technical and financial viability of SW and also assist with some of sector governance and regulatory issues. These two sets of improvements form the foundation of SW's ability to achieve financial efficiency which ultimately leads to creditworthiness. Overall, while the project is not MFD enabling, it is supportive of the MFD agenda given the strong emphasis on enhancing services and revenues as well as improving the technical and financial position of SW.

SAFEGUARDS

A. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The environment in Greater Honiara is greatly modified and substantially degraded due to uncontrolled urban sprawl, lack of solid waste management and aged / absent sewage sanitation infrastructure. Communal septic tanks are overflowing or have blockages and consequently, raw sewage is found in stagnant ponds at various locations. The sewage outfalls to sea and the river have been damaged over the years, resulting in discharges to the beach at 13 locations along Honiara's water front and to informal gardens along the river banks. Groundwater wells for drinking water abstraction are located nearby sewage outfalls, septic tanks and unserved informal dwellings, leading to groundwater contamination and public health risks.

The current septage disposal facility is located at the landfill. The facility is not engineered and septage is dumped directly to the ground. Due to its location in a swampy area that is subject to flooding, infiltration and drying of the septage is severely hampered and again leads to environmental degradation of the nearby soil and groundwater.

Apart from the Lungga River water supply scheme, all interventions in Honiara will take place in existing SW facilities and brownfield areas. Although the locations for the Lungga River water supply scheme intake and the water treatment plant (which would possibly be implemented once GCF financing is confirmed) have not been determined yet, the general area around the river is largely modified and vegetation has been cleared throughout the hills surrounding Greater Honiara.

The majority of the interventions in provincial capitals will also take place in brownfield areas, although the general environment at these locations has not been ascertained yet and may include areas of natural habitat. Interventions at Tulagi are likely to be nearby WW II historical sites, which needs to be assessed when the exact locations of proposed works are finalized.

B. Borrower's Institutional Capacity for Safeguard Policies

The proposed implementation arrangements will involve Solomon Water as the single Implementation Agency. Solomon Water (SW) has not implemented IFI-funded projects before and is hence not familiar with World Bank and ADB Safeguard policies. In addition, the organization does not employ corporate environmental and social safeguard specialists and is not operating in accordance with the requirements of an environmental management system or any

safeguard procedures in general.
The enforcement capacity of the Environment Conservation Department within the Ministry of Environment, Climate Change and Disaster Management is severely constrained due to a lack of enforceable standards and procedures, financial and human resources.

As the lead for the project, ADB has retained a consultant to undertake feasibility studies and concept designs for the various core projects and a small number of subprojects. The consultant's scope includes the preparation of an Initial Environmental Examination (IEE) for the core projects in Greater Honiara, as well as an Environmental Assessment and Review Framework (EARF) for the subprojects which remain largely undefined. Social Safeguards documentation to be prepared under the current TA include a stakeholder analysis, community consultation strategy, a resettlement framework and resettlement plan, and a gender action plan.

PMU staffing is foreseen to ramp up in August 2018 and will include at least one safeguards specialist. SW employs a consultant who deals with community consultation and land matters, who is likely to also be involved with the UWSSS project.

C. Environmental and Social Safeguards Specialists on the Team

Ross James Butler, Social Safeguards Specialist
Joyce Onguglo, Social Safeguards Specialist
Nathalie Suzanna Noella Staelens, Environmental Safeguards Specialist

D. Policies that might apply

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The project is proposed as Category B. The proposed project involves the rehabilitation and expansion of failing water supply and sanitation infrastructure, as well as the development of more resilient and diversified water supply sources. The social and environmental benefits that will results from the project are generally positive, including reduction of public health and environmental contamination risks. There are no potential large-scale, significant or irreversible impacts associated with the project. Environmental risks associated with the project include continued contamination impacts resulting from the discharge of untreated sewage and septage treatment facility effluent, temporary noise, waste and air quality impacts associated with construction, reduced river flows and potential limited vegetation clearing for the purpose of creating access to new water supply sources, constructing the water and septage treatment plants, etc. There may also be

		potential impacts on historical sites in Tulagi where interventions to improve water supply are planned. The environmental and social risks will be managed through regular community consultations (project awareness). An Initial Environmental Examination (IEE), Environmental Assessment and Review Framework (EARF), Resettlement Framework (RF) and Resettlement Plan (RP) will be prepared for the project by the ADB commissioned TA. The IEE will assess direct and indirect impacts, as well as cumulative and induced impacts of the Greater Honiara and Gizo water supply and sanitation core projects. For the subprojects in the other provincial capitals, incl. Noro, Tulagi and Auki, an EARF will be developed to provide guidance on the required level and content of environmental assessments once the projects are better defined. The EARF will be followed by an IEE for the subprojects in the provincial capitals, including Tulagi, Noro and Auki. The contents of an IEE, EARF, RF and RP are broadly aligned with those of an ESIA (for Partial Assessment), ESMF, RF and RAP respectively. The safeguards team will need to review the safeguards documents and make a judgment if they are deemed acceptable, and if not, work with the Borrower on identifying and closing any significant gaps.
Performance Standards for Private Sector Activities OP/BP 4.03	No	
Natural Habitats OP/BP 4.04	Yes	The project involves the rehabilitation of existing water supply / sanitation infrastructure and the development of new water supply sources. The interventions will take place within existing SW facilities or modified greenfield areas and are therefore not expected to significantly impact natural habitats. The IEE will include an assessment of the potential impacts on natural habitat and outline measures to avoid, mitigate and or manage these impacts. The locations for investments in the provincial capitals have not been fully identified at this stage. As these

		may include areas of natural habitat, the applicability assessment of the policy will be undertaken when the locations are identified. For these investments, an EARF will be developed to provide guidance on the assessment process.
Forests OP/BP 4.36	No	The project will not impact on any forested areas hence this policy is not triggered
Pest Management OP 4.09	No	The project will not involve pest management hence this policy is not triggered
Physical Cultural Resources OP/BP 4.11	Yes	The project involves construction works in modified urban and peri-urban areas, where it is unlikely that unknown physical cultural resources will be encountered. However, a chance find procedure will be included in the IEE to ensure appropriate measures are taken in the event cultural resources are encountered. The planned works in Tulagi are located in an area where relics and infrastructure from WW II are present. When the exact locations of the works are identified, a cultural resources impact assessment will need to be carried out as part of the IEE. In addition, the chance find procedure will also be captured in the IEE for the provincial capitals.
Indigenous Peoples OP/BP 4.10	Yes	The project is located in areas where Indigenous Peoples are the sole or the overwhelming majority of direct project beneficiaries. The project will focus on rehabilitating failed water supply and sanitation infrastructure, this will benefit the community as a whole. As a positive impact, there will be no negative impact on the community in both urban and rural areas. An RF and RP will be conducted in the project area and will include consultations with local government, local communities and various community groups (i.e. youth and women groups). The IEE will ensure free and prior informed consultation is undertaken and broad community support is achieved for the project. The preparation of separate IP instruments are not required, however the project design and safeguards instruments will integrate elements of an IPPF and IPP into the RF. The safeguards team will provide support and review the RF to ensure that elements of the IP

		are included as a part of the common approach and MoU.
Involuntary Resettlement OP/BP 4.12	Yes	The project involves the rehabilitation and expansion of failed water supply and sanitation infrastructure. Water and sewerage networks will likely be subject to lease arrangements. Involuntary resettlements, if required, are expected to take place at a very limited scale. A Resettlement Framework (RF) and Resettlement Plan (RP) will be prepared to assess potential impacts and outline measures to avoid, mitigate or manage these impacts. Communities will be consulted to ensure there are no pending issues. A formal grievance redress mechanism will be established to channel and manage potential grievances arising during project implementation. The safeguards team will assist in reviewing the RF and RP to avoid, mitigate and/or manage any impacts of land related issues especially in places like Auki.
Safety of Dams OP/BP 4.37	No	The project will not finance any dams as defined under OP 4.37.
Projects on International Waterways OP/BP 7.50	No	The project does not impact or relate to any known international waterways as defined under the policy.
Projects in Disputed Areas OP/BP 7.60	No	The project is not located in any known disputed areas as defined under the policy.

E. Safeguard Preparation Plan

Tentative target date for preparing the Appraisal Stage PID/ISDS

Nov 12, 2018

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

IEE, EARF, RF and RP, stakeholder analysis and consultation strategy were initiated April 2018 and are to be completed by October 2018.

CONTACT POINT

World Bank

Stephane Raphael Dahan, Edkarl M. Galing
Senior Water Supply and Sanitation Specialist

Borrower/Client/Recipient

Ministry of Finance and Treasury
Harry Kuma
Permanent Secretary
hkuma@mof.gov.sb

Implementing Agencies

Solomon Islands Water Authority
Ian Gooden
General Manager
IGooden@solomonwater.com.sb

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: http://www.worldbank.org/projects

APPROVAL

Task Team Leader(s):	Stephane Raphael Dahan, Edkarl M. Galing

Approved By

Safeguards Advisor:		
Practice Manager/Manager:		
Country Director:		

Note to Task Teams: End of system generated content, document is editable from here. ***Please delete this note when finalizing the document.***