The World Bank
Lowlands Water Development Project - Phase II (P160672)

Note to Task Teams: The following sections are system generated and can only be edited online in the Portal. Please delete this note when finalizing the document.

Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 25-Mar-2019 | Report No: PIDISDSA24692
### BASIC INFORMATION

#### A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Project Name</th>
<th>Parent Project ID (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesotho</td>
<td>P160672</td>
<td>Lowlands Water Development Project - II</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated Appraisal Date</th>
<th>Estimated Board Date</th>
<th>Practice Area (Lead)</th>
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<tr>
<td>AFRICA</td>
<td>26-Mar-2019</td>
<td>30-May-2019</td>
<td>Water</td>
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<table>
<thead>
<tr>
<th>Financing Instrument</th>
<th>Borrower(s)</th>
<th>Implementing Agency</th>
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</thead>
<tbody>
<tr>
<td>Investment Project Financing</td>
<td>Ministry of Water Affairs - Commission of Water</td>
<td>Lowlands Unit</td>
</tr>
</tbody>
</table>

#### Proposed Development Objective(s)

The Proposed Development Objectives are to: (i) increase water availability and access to improved water supply services in two priority zones; and (ii) improve technical and financial performance of WASCO.

#### Components

- Component 1. Water Supply Investments in Zones 2 and 3
- Component 2. Capacity Building, Institutional Strengthening and Project Management
- Component 3. WASCO Performance Improvements
- Component 4. Contingent Emergency Response Component

### PROJECT FINANCING DATA (US$, Millions)

#### SUMMARY

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Project Cost</td>
<td>85.80</td>
</tr>
<tr>
<td>Total Financing</td>
<td>85.80</td>
</tr>
<tr>
<td>of which IBRD/IDA</td>
<td>78.00</td>
</tr>
<tr>
<td>Financing Gap</td>
<td>0.00</td>
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</table>

#### DETAILS

**World Bank Group Financing**

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount (US$)</th>
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<tbody>
<tr>
<td>International Development Association (IDA)</td>
<td>78.00</td>
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<tr>
<td>IDA Credit</td>
<td>78.00</td>
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Non-World Bank Group Financing

<table>
<thead>
<tr>
<th>Counterpart Funding</th>
<th>7.80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrower/Recipient</td>
<td>7.80</td>
</tr>
</tbody>
</table>

Environmental Assessment Category
A-Full Assessment

Decision
The review did authorize the team to appraise and negotiate

B. Introduction and Context

Country Context

1. **The Kingdom of Lesotho is a small landlocked country in Southern Africa with a population of about two million people.** With a gross domestic product (GDP) per capita of US$1,020, Lesotho is one of the poorest countries in the region. An estimated 57 percent of the population live below the national poverty line and 34 percent fall below the extreme poverty line— with expenditures below minimum food requirements. Lesotho generates income mainly by exporting textiles and diamonds. It is a member of the Southern African Customs Union (SACU), the Southern African Development Community (SADC), and the Common Monetary Area. GDP growth was 2.5 percent in 2016/17, down from a 4.5 percent average over the previous five years. Lesotho is facing a tough fiscal and economic outlook given a sharp decline in SACU revenues and high current account deficits, which require substantial fiscal adjustment to restore macro-economic stability. In addition, political instability, climate vulnerability, and high rates of HIV/AIDS are significantly affecting Lesotho’s potential for growth.

Sectoral and Institutional Context

2. **Water is one of Lesotho’s most valuable natural assets, and it is central to the country’s long-term growth prospects.** The water sector contributes an estimated 8 percent to Lesotho’s GDP. A large portion of this is derived from revenues associated with the Lesotho Highlands Water Project (LHWP), a multi-stage infrastructure project that facilitates the transfer of water from Lesotho’s water-rich highlands to South Africa as well as contributes to developing Lesotho’s hydropower resources. Recent water programs, which focus on increasing the quantity of water transferred to South Africa and exploring the possibility of transferring water to Botswana, have further reinforced water’s central role in Lesotho’s economy. Balancing water resources development for export against the national priority of improving water supply and sanitation (WSS) infrastructure and services in Lesotho—particularly in the Lowlands is one of the key challenges for the

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1 An average of around US$20–30 million (4.8 percent of GDP) per year in royalties is received from the LHWP. This is expected to increase with the development of Phase II of the LHWP. It includes provisions for augmenting water transfer to South Africa through construction of a new dam and transfer tunnel, along with a hydropower component to generate electricity for the benefit of Lesotho.
Government of Lesotho (GoL). In addition to constraining investment and associated economic growth, lack of adequate WSS results in poor public health and environmental conditions.

3. While access to water supply services in Lesotho appears relatively high compared to peers in Sub-Saharan Africa, the reliability and quality of services remains a challenge in both rural and urban areas. About 95 percent of urban and 73 percent of rural households have access to an improved source of drinking water. However, a 2017 study showed that just 8 percent of households reported their water source reliable. Previous studies in 2004 and 1995 similarly found that households reported having unreliable primary water sources. Moreover, rising industrial demand for water, rapid urbanization growth in and around the Maseru Metropolitan Area and other industrial towns such as Maputsoe, and dilapidated infrastructure have steadily increased the pressures on WSS services. Maputsoe currently relies heavily on WASCO and private sector supplied tanker water mostly from the Teyateneng supply.

4. Considering the challenges facing the WSS sector, the GoL articulated an ambitious vision (Lesotho Vision 2020) to provide 100 percent of the population with improved WSS services and to build a water security platform that spurs competition and job creation. The GoL’s National Strategic Development Plan, which focuses on inclusive growth and the development of key infrastructure, identifies the rehabilitation and development of WSS infrastructure as a priority area for promoting economic growth and reducing poverty.

5. The GoL, with support from the World Bank and other development partners, has since embarked on several investment projects in the Lowlands, including the Metolong Dam Water Supply Program (MDWSP), the first project under the LLWSS, and the Lowlands Rural Water Supply and Sanitation Project (LRWSP). The World Bank also financed the Water Sector Improvement Project (WSIP), approved in 2004. WSIP was designed as a two-part Adaptable Program Loan (APL) (WSIP APL1 and WSIP APL2). WSIP APL1 supported water sector reforms focused on strengthening WASCO, national water resources policies and strategies, and urban water service delivery. The WSIP APL2, approved in 2009, supported the MDWSP by financing (a) the extension of a bulk water supply pipeline to the town of Teyateyaneng, (b) an environmental and social management program for the entire MDWSP, and (c) institutional strengthening and capacity building for WASCO and other national sector institutions. The WSIP APL supported the GoL in carrying out a series of sector reforms to strengthen service provision, coordination, and decentralization efforts. Key aspects of the reforms include the 2007 Water and Sanitation Policy and the Water Act of 2008. The reforms established the current legal framework and institutional arrangements for the sector.

6. The Metolong water supply system, which was launched in 2015, provides additional treated water to a large portion of the Lowlands population located in Maseru and adjoining urban towns (Teyateyaneng, Morija, and Roma). The system is expected to meet domestic and industrial water requirements in those areas through 2050. The LRWSP is supporting a Tertiary Lines Project to provide drinking water from the Metolong Dam conveyance system, as well as construction of sanitation facilities and hygiene and sanitation promotion campaigns extending benefits of the system to rural areas in the districts of Berea and Maseru. These activities are expected to improve the WSS coverage in two of eight designated water demand zones in the Lowlands. In

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3 MDWSP was financed by nine development partners (IDA, the Millennium Challenge Corporation, Saudi Development Fund, Organization of the Petroleum Exporting Countries Fund, Kuwait Fund, Arab Bank for Economic Development in Africa, Abu Dhabi Fund for Development, the European Investment Bank [EIB], and the African Renaissance and International Cooperation Fund of the Republic of South Africa). The MDWSP water system includes the 73 m high Metolong Dam, a water treatment plant, and a conveyance system to supply water to Maseru and adjoining urban towns.
2014, the World Bank approved additional financing for APL2, to support, among others, the updating of detailed designs, safeguards instruments, and other studies for preparation of the next phases of the LLWSS.

7. While Lesotho’s reform efforts supported through the previous projects have resulted in some important strides to improve WSS in urban areas, challenges remain to transform WASCO to a well-performing water utility, improve WSS services in rural areas and small towns, and ensure a sustainable operation of the bulk water infrastructure. The corporatization of WASCO in 2010 and the creation of an authority (Lesotho Electricity and Water Authority [LEWA]) to regulate and enforce water and energy services brought much-needed change to the sector. WASCO reduced water losses, covered more operating costs and some debt service costs with tariffs, and widened its consumer base. Although the recipient of extensive technical assistance (TA) over the years from various donors, WASCO has yet to operationalize that support and achieve its full potential. For example, its financial statements have been routinely ‘qualified’ by independent auditors, collection rates can be improved, regulatory compliance (whether drinking water quality, effluent quality, or economic) is poor, and the sewer connection rate is low. There appears to be a highly centralized, low-incentive culture, which requires to be addressed by a major change management initiative.

8. To address the above challenges, the CoW developed the Long-Term Water and Sanitation Strategy (LTWSS) in 2014 and is in the process of revising the Water and Sanitation Policy and Water Act to consolidate and streamline sector roles and responsibilities related to bulk water supply and to improve service provision in rural and peri-urban areas. Following the LTWSS recommendation, the GoL started the process of establishing the Lesotho Bulk Water Supply Agency (LBWSA), which is proposed to be responsible for implementation, asset management, and O&M of bulk water systems countrywide while WASCO will continue with the O&M of the water distribution system. The Government is still considering options for an optimal structure for the LBWSA, and a roadmap for its establishment is not confirmed. In the meantime, WASCO remains with the responsibility to manage the bulk potable water supply assets.

9. With the completion of the first phase of the LLWSS through the MDWSP covering Maseru and surrounding towns, the GoL has focused on preparing for the next implementation phase of the LLWSS. The LLWSS consists of five bulk water supply schemes that serve eight designated water demand zones and the area of Semonkong. These zones fall into three main regions: northern, central, and southern (Map 1). The Metolong project covered WSS investments in two zones (Zones 4 and 5, supplying Maseru and Teyateneng). The Government is exploring financing options for the next phase of LLWSS, initially comprising four additional zones namely 2, 3, 6, and 7, and has received confirmation of potential funding from the European Union (EU) and EIB. The GoL’s decision to prioritize investments in Zones 2 and 3 (Maputsoe and Hlotse), Zone 6 (Mafeteng), and Zone 7 (Mohale’s Hoek) was based on the level of unmet water demand, the severe impact of droughts, and the relatively positive impact on livelihoods and economic activity. The World Bank, in view of financing limitations,
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further prioritized focusing on investments in Zones 2 and 3 based on their alignment with the World Bank’s Country Partnership Strategy to support Water for Growth. Thus, the World Bank will finance the proposed Lesotho Lowlands Water Development Project (LLWDP), covering these two priority zones, while the EU and EIB will finance investments in zones (Zones 6 and 7) based around Mafeteng and Mohales Hoek and the surrounding areas, based on the potential to address the severe impact of droughts in those areas. The EU and EIB will finance the latter through a parallel project implemented by the same implementing agency (Ministry of Water [MoW]).

C. Proposed Development Objective(s)

11. The proposed development objectives are to (i) increase water availability\(^8\) and access\(^9\) to improved water supply services in two priority zones; and (ii) improve the technical and financial performance of WASCO.

12. Achievement of the Project Development Objective (PDO) will be measured through the following indicators:
   - Increased water production capacity by 25,000 (cubic meters/day) for priority water zones
   - People provided with access to improved water sources (number, of which female, percentage) (corporate indicator)
   - People with existing connections benefitting from improved services\(^10\)
   - WASCO achievement of annual, regulatory mandated, performance improvement targets

D. Project Description

13. The project will have four components that are summarized below.

14. **Component 1. Water Supply Investments in Zones 2 and 3.** This component will finance a program of activities designed to improve access to reliable domestic and industrial water supply services in Maputsoe and Hlotse towns, and settlements and villages along the transmission pipeline route. The activities include: (a) construction of the bulk water supply scheme which will abstract water from the Hlotse river and transfer it to the project towns; the system will include a river intake structure, source protection measures to protect the local environment and reduce the effects of flooding, a water treatment plant, transmission lines, reservoirs, and auxiliary facilities; (b) construction and rehabilitation of distribution water mains and networks in the Maputsoe and Hlotse towns and surrounding settlements, including installation of meters, household service connections, leakage reduction measures, and standpipes; and (c) consultancy services for construction supervision and quality assurance of water supply infrastructure contracts, technical studies, and engineering designs. Investments also include borehole rehabilitation in Maputsoe. Implementation of these investments will be advanced into the first year of the project to deliver improved availability of water supply in response to the likely adverse impact of the “El Nino”.

15. **Component 2. Capacity Building, Institutional Strengthening and Project Management.** This component will strengthen sector institutions, support implementation of the LLWSS and develop a comprehensive Strategic

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\(^8\) Availability of water services entails improvements in overall water production capacity sufficient for zones 2 and 3 in the short to medium-term, i.e. up to 2030.

\(^9\) Access to improved water services encompasses both consumers accessing new services and those benefitting from improved service quality in terms of increased continuity of service.

\(^10\) Improved water supply services will be assessed in terms of the average minimum hours of service per day.
Sanitation Plan through financing of consultancy services, systems, and equipment to support three broad categories of activities: project management, Institutional strengthening support to other sector departments, strategic Sanitation Planning TA.

16. **Component 3. WASCO Operational Performance Improvements.** This component will support WASCO to improve its performance through a mix of institutional strengthening complemented by output-based payments with disbursement dependent on verifiable achievement of targets set in three Disbursement Linked Indicators (DLI).

17. **Component 4. Contingent Emergency Response Component (CERC).** In the event of an Eligible Crisis or Emergency, this contingent Component will provide immediate and effective response to said Eligible Crisis or Emergency, defined as “an event that has caused, or is likely to imminent cause a major adverse economic and/or social impact associated with natural or man-made crises or disasters.”

### E. Implementation

#### Institutional and Implementation Arrangements

18. **Legal agreements.** The Ministry of Finance (MoF), representing the GoL as the borrower, will sign a Financing Agreement for the IDA credit with the World Bank.

19. **Project Steering Committee.** The GoL will establish a Lowlands Water Supply Steering Committee (SC) to oversee preparation and implementation of the project. The SC will be chaired by the MoW Principal Secretary (PS level) and constitute members (Senior Government/Directors or Chief Executive Officer) from the MoF, MoDP, MoH, WASCO, Ministry of Local Government and Chieftaincy affairs (MLG), and others as deemed relevant by the GoL. The SC will provide oversight and guidance on project implementation. It will also facilitate inter-institutional coordination and will resolve legal, policy and operational bottlenecks as necessary. The SC will meet at least twice a year and shall inform the Government (through the MoW) on progress and challenges confronting the project. The CoW and the PIU Manager will be ex-officio members of the SC. The PIU shall form the Secretariat of the SC.

20. **Project implementing arrangements.** The project will be implemented by the MoW through the office of the CoW. The CoW will be responsible for signing all contracts and authorization of contractor's payments. It will report progress to the MoF and financiers and coordinate with other ministries.

21. **PIU.** The PIU will be responsible for implementation of the project. The PIU will report to the CoW and will constitute a core team comprising government staff, secondees from WASCO and DRWS, and supported by experienced individual consultants financed by IDA, including a PIU manager, a procurement specialist, a financial management (FM) specialist, a social and an environmental safeguards specialist, a monitoring and evaluation (M&E) specialist, and a civil engineer. The WASCO and DRWS secondees will be dedicated staff, selected on the basis of terms of reference (TOR) acceptable to the World Bank, who will ensure that the project design and implementation for Components 1 and 2 have a strong link with the planning, O&M, and service delivery activities managed by both agencies. The PIU will accommodate periodic secondment of additional staff from WASCO and DRWS to participate in specific activities to ensure that capacity and skills are transferred to, and retained in, these agencies after the project closes. Appointment of core PIU staff is ongoing, and the Social Safeguards
Specialist, Procurement Specialist, Financial Management Specialist and Monitoring and Evaluation Specialist have been appointed. The PIU Director position has been advertised and is expected to be filled by project effectiveness. The ToR for the PMC, which will be financed through the EU grant, is also under preparation and the firm is expected to be selected early during implementation. The PIU will manage project implementation until the PMC is hired.

22. **PMC.** The PIU will be complemented by a PMC firm, financed by the EU, to support day-to-day implementation of the project. The PMC will report to the CoW through the PIU Manager. The functions of the PMC will include, among others, support for managing procurement of goods, works, and services under the project; contracts management; physical monitoring of works, including the technical, safeguards, and other aspects; and financial status and disbursement forecasting. The PMC shall be a firm with expertise satisfactory to the Government and the two funders.

23. **WASCO Project Team.** Eligible expenditures using funds disbursed on the verified achievement of the DLIs in Component 3 will be managed by a team in WASCO. The team will be assessed by the World Bank during early project implementation. A WASCO team with capacity acceptable to the Bank will be a disbursement condition for Component 3. The WASCO team will report progress to the PIU. The roles of the implementing entities will be further detailed in the Project Operations Manual (POM).

**F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)**

The project activities, comprising of an intake for water abstraction from the Hlotse River, a water treatment plant, reservoirs, pumping stations and transmission pipelines and distribution network. They will be implemented in the northern part of lowlands area of Lesotho. The Lowlands region is characterized by hot humid summers and cold dry winter, with an annual precipitation of approximately 600mm. The yearly average maximum temperatures are 13.9ºC and the average yearly minimum temperatures are 1.7ºC. Zones 2 and 3 are predominantly cultivated, particularly in the flatter plateaus and plains. The project area is characterized by a mix of rural, peri-urban, urban and an industrial zone. The two major towns of Maputsoe and Hlotse are experiencing rapid urbanization with unplanned settlements and encroachment on the road reserve and arable land. Maputsoe has seen an increase in the growth of the garment industry that has stimulated an increase in urban migration and increased demand for water. Improvement of water infrastructure in Maputsoe and other urban settings in Lesotho represents part of the Government of Lesotho’s (GoL) efforts to diversify the economy and improve the provision of essential services. To meet these increasing demands, the GoL has recognized the need to provide water to the growing garment industry and portable water for the fast-growing urban areas. The rural and peri-urban areas comprise of farming communities scattered across the landscape. Most of the farming activities are small scale subsistence farming. The general pipeline alignment will be directly outside the road reserve in some instances, intersecting grazing and arable lands and residential areas. Overall positive impacts associated with the project are expected to include: (a) improved reliability of water supply and resilience of the domestic and industrial sectors; (b) job creation during construction period. The water intake is located on the Hlotse river, which is a tributary of the Mohokare/Caledon River, an international waterway which is part of the Orange-Senqu[1] river basin. As part of the project preparation process, the Government of Lesotho, in line with World Bank OP 7.50, through the Orasecom Secretariat, formally notified the other
riparians of the river, South Africa, Botswana and Namibia, of the project. No objections were received from any of the countries.

G. Environmental and Social Safeguards Specialists on the Team

Kisa Mfalila, Environmental Specialist
M. Yaa Pokua Afriyie Oppong, Social Specialist
Majbritt Fiil-Flynn, Social Specialist
Mantsebo Moipone Amelia Ndlovu, Social Specialist
Ntaoleng Celestina Mochaba, Environmental Specialist

SAFEGUARD POLICIES THAT MIGHT APPLY

<table>
<thead>
<tr>
<th>Safeguard Policies</th>
<th>Triggered?</th>
<th>Explanation (Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Assessment OP/BP 4.01</td>
<td>Yes</td>
<td>The Project is classified as Category A due to (i) significant scope of physical infrastructure to be constructed and the associated earthworks that will take place within a sensitive ecosystem mainly the Hlotse River, (ii) complexity and inter-dependency of different water systems in augmenting the river capacity to ensure reliable supply of water to the water treatment plant, and (iii) reliance on water releases from the Katse Dam through a constructed tunnel located in Tsehlanyane National Park to augment the capacity of the Hlotse River during the dry season. Works to be carried out under Component 1 include (i) a river intake structure on the Hlotse River (ii) a water treatment plant (WTP), (iii) water reservoirs, (iv) pumping stations and water mains, and (v) associated infrastructure, such as power supply extension and control and telemetry equipment. This component will also include rehabilitation and construction of distribution networks in Maputsoe town and nearby settlements. The bulk water scheme is designed for 26,000 m³/day to provide sufficient capacity to meet future demands by abstracting water from the selected river, treating it, then pumping it to high level reservoirs with sufficient head to supply the...</td>
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</table>
population who live within the project area. Component 1 will rely on releases from the Katse Dam during the dry season to augment flows. Accordingly, it would rely on the performance of that dam in releasing agreed amounts. The releases are governed by the existing Lesotho Highlands Water Program (LHWP) Treaty and protocols which allow for storage and draw down of water by Lesotho from the LHWP system through the Hlotse Adit into Hlotse River. Annually the Government of Lesotho can draw down up to 5 MCM from the storage of which up to 75% (3.75 MCM) can be released into Hlotse River per annum, with the remaining 25% allocated to the environment flows of the Muela River. The treaty also allows accumulation or banking of unused annual allocation up to a maximum storage of 15MCM which can be drawn down when required. The draw down is through releases from Katse Dam via a tunnel connecting to Muela dam – Hlotse Adit.

The project is expected to bring overall environmental benefits that will contribute to the improvement of public health and living environment in the targeted project areas. Some of the project activities serve as mitigation measures toward addressing the existing public health and environmental problems caused by lack of adequate water supply and sanitation facilities in the project area.

The Government will ensure preparation of a livelihood restoration plan to address any training or changes in practice required by changed conditions among downstream water users and to compensate for losses and restore livelihoods through alternative means if necessary. This provision has been covered through a legal covenant in the Financing Agreement.

Key social and environmental impacts associated with the project are discussed under Section A.1 on safeguards issues and impacts.
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<tr>
<th>Operation and Performance Standards (OP/BP)</th>
<th>Compliance</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Performance Standards for Private Sector Activities (OP/BP 4.03)</td>
<td>No</td>
<td>The construction of an intake structure will take place within the Hlotse Rivers. As such, construction activities associated with the intake sites may cause temporary to long-term impacts on critical invertebrate biotopes and fish habitats during and after construction due to increased erosion, river bed and river bank modification, loss of connectivity and flow diversions. The level of suspended solids in the river downstream of the intake structures will likely increase due to disturbances of the river bed by excavation activities during the construction stage. Per the South Africa Biodiversity Institute, the project area is mainly covered by one dominant vegetation type, which falls under the group of “Grassland Biome”, and more specifically the “Mesic Highveld Grassland Bioregion” classified as Senqu Montane Shrubland which is the type of grassland dominated by evergreen shrubs, the dominating species being Rhus erosa, Olea europaea and Diospyros austro-africana.</td>
</tr>
<tr>
<td>Natural Habitats (OP/BP 4.04)</td>
<td>Yes</td>
<td>The riparian vegetation assessment undertaken for the Instream Flow Requirements confirms that the riparian vegetation zone has limited reliance on the river flows. However, at least some level of permanent flow in the river system will be required to ensure that the riparian vegetation continue to colonize the area and, thereby, improve the biodiversity of the area. A detailed EFR study including monitoring and operational procedures will be carried out prior to detailed design of the water intake and treatment plant under Component 1 to determine if any migratory fish species will be affected by the proposed project on the Hlotse River. A legal covenant has been included in the Financing Agreement committing the government to carry out this activity, and said activity will also be included in the bidding documents for the design contract.</td>
</tr>
<tr>
<td>Forests (OP/BP 4.36)</td>
<td>No</td>
<td>The Project will not finance any forest restoration, development of plantations, charges in forest use or</td>
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management or protection. There are also no forest areas within the project area of influence that could be affected by the project, and therefore OP/BP 4.36 is not triggered.

<table>
<thead>
<tr>
<th>Pest Management OP 4.09</th>
<th>No</th>
<th>The Project will not procure nor will it lead to increased use of pesticides. Therefore, OP 4.09 is not triggered.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Cultural Resources OP/BP 4.11</td>
<td>Yes</td>
<td>An analysis of existing Physical Cultural Resources has been carried and Chance Find procedures for identification of Physical Cultural Resources will be included in contractor's contracts. A paleontological impact assessment will be carried out as part of the updated EFR assessment to be carried out in the areas of highest fossil potential prior to detailed design of the water intake and treatment plant under Component 1.</td>
</tr>
<tr>
<td>Indigenous Peoples OP/BP 4.10</td>
<td>No</td>
<td>The policy is not triggered as there are no indigenous peoples in Lesotho meeting the criteria of OP 4.10.</td>
</tr>
<tr>
<td>Involuntary Resettlement OP/BP 4.12</td>
<td>Yes</td>
<td>The project will require some permanent acquisition of land, as well as temporary occupation of land and would result in restricted access to communal resources during construction. The Involuntary Resettlement Policy OP/BP 4.12 is therefore triggered due to project activities under Component 1. A Resettlement Framework has been prepared in line with Government regulations and in accordance with the World Bank’s Involuntary Resettlement Policy. There are likely to be several impacts due to land acquisition which includes loss of land, loss of community assets etc. There is also noticeable encroachment of the road by the informal sector in major towns such as Maputsoe and Mafeteng therefore temporary relocation of make shift shops from road reserve is likely for the laying of transmission pipelines. A RAP has been prepared for the activities relating to the water intake, water treatment plant and transmission mains and has been disclosed in-country and at the Bank external website. The RAP has identified 267 PAPs and these will be compensated based on the project entitlement matrix. Updates to the RAP will be required to validate the entitlement matrix prior to disbursement of compensation payments to Project Affected Persons (PAPs).</td>
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The Project will be guided by a Social Impact Assessment as part of the ESIA, and will develop a detailed communications plan. Citizen engagement is a key component and the PIU will oversee ongoing and meaningful consultation in communities. Vulnerable groups will receive special attention. Any loss of assets will be recorded and Project management will maintain a database of affected people.

<table>
<thead>
<tr>
<th>Safety of Dams OP/BP 4.37</th>
<th>Yes</th>
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<tbody>
<tr>
<td>The viability of the bulk water supply system under Zones 2 and 3 will rely on water releases from the existing Katse Dam located in the upper reaches of the Hlotse River via an existing water diversion valve/tunnel. The structural and non-structural safety of the Katse Dam has been assessed including its monitoring reports, 10-year dam safety review report, emergency preparedness plan, etc. in line with OP 4.37 of the World Bank Safeguard Policies has been carried out, and found satisfactory.</td>
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<thead>
<tr>
<th>Projects on International Waterways OP/BP 7.50</th>
<th>Yes</th>
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<tr>
<td>Component 1 will finance an intake structure that will be constructed within the Hlotse River to abstract raw water which will then be delivered directly to an inlet of a new water treatment plant. The Hlotse River is a tributary of the Caledon River, a border river between South Africa and Lesotho. Both rivers fall within the greater Orange-Senqu basin which is an international waterway shared by four riparian countries—Botswana, Lesotho, Namibia and South Arica. OP 7.50 is triggered and notification to riparian countries was undertaken by the Government of Lesotho in a letter dated 17 September 2018. Confirmation of receipt was provided by the countries in the ORASECOM Council meeting of 22 October 2018. A no objection response from Botswana was received in writing in October 2018. The other two riparians, South Africa and Namibia did not provide any objection to the project by the expiry date for the notification based on the 6 month response period allowed for under the ORASECOM Agreement (March 17, 2019).</td>
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The World Bank  
Lowlands Water Development Project - Phase II (P160672)  

Projects in Disputed Areas OP/BP 7.60 | No  
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The project will not finance activities located in any known areas under territorial dispute as defined in OP 7.60. Therefore, the policy is not triggered.

**KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT**

**A. Summary of Key Safeguard Issues**

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

   i) Impacts on water quantity and quality: The most significant environmental impacts likely to occur during the construction and operational phases of the project are associated with the alterations in the quantity and quality of water in the Hlotse River to meet the livelihoods requirement of the communities dependent on the river and maintenance of aquatic habitat. Both impacts on the water quality and quantity will occur during the construction state of the project and might likely persist during the operational phase, and are therefore, considered long-term as discussed below in more detail:

   ii) Impact on aquatic ecosystems: The possible impacts of the proposed abstraction on the aquatic ecosystems of the Hlotse River will be most severe during the critical low flow periods (July to September) due to the following reasons, (a) During critical low flow periods connectivity might be lost between the upper and lower reaches of the Hlotse River which would have a severe impact on migrating fish species in the river, (b) Dilution factors of possible water pollutants will be maximally reduced during critical low flow periods’ endangering water quality sensitive aquatic invertebrate and fish species, (c) Flow velocities will drop critically low during these dry periods such that velocities of above 0.6m/s and even 0.3m/s would most likely not be maintained, which would severely impact on populations of critically flow dependent aquatic invertebrate and fish indicator species, (d) Possible releases from the Katse Dam (through the constructed tunnel) to augment the flows in the Hlotse River during the critical low flow periods in order to ensure the continuation of water abstraction, might alter the water quality of the Hlotse Rivers.

   iii) Water Quality: As part of water supply pipeline construction, the pipelines will be cleaned and flushed prior to the operational phase. This involves large volumes of water that typically contains chlorine solutions. The findings from the EIA indicate that the potential impact of discharging large volumes of water containing elevated levels of chlorine will be site-specific, low-intensity, and of medium to low significance.

   iv) Land use: A significant portion of the land is being actively cultivated, particularly across the flatter plateaus and plains, with the majority being used for subsistence farming using mainly oxen and ploughs as the farming equipment. The environmental assessment confirms that there are no large scale commercial farming activities in the project area. The pipeline routes will follow the existing road reserves for a large portion of its route. However, in some areas, the pipeline route will cross grazing and arable land or will cut across residential areas. The project area in which the water treatment plants will be located is currently used as a rangeland for livestock. The reservoirs will be located on an elevated, flat section of the land in proximity to the communities to which water will be supplied.

   v) Soil: The project area is characterized by shallow soils which are sensitive to erosion as they overlie relatively impermeable hard or weathered rock. Heavy or prolonged rainfall events are likely to cause these soils to reach saturation point relatively quickly, resulting in surface runoff and subsequent erosion. In areas where the vegetative
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cover is either degraded through overgrazing and burning, these soils are likely to erode and particularly so on the steeper slopes.

vi) The social impacts primarily relate to temporary and permanent acquisition of land and restricted access to communal lands. A Resettlement Action Plan provides operational guidance and compensation for affected persons. A Resettlement Policy Framework (RPF) provides guidance for additional investments where the footprint is not currently known. The RPF guides all investments under the LLBWSS, including impact related to expansion of household connections. All households affected by the project will also become direct project beneficiaries as they will receive water supply by the LLBWSS which is expect to enable health and economic benefits. A total of 267 households will be impacted by the project in the area covered by the existing RAP, comprising a total of 828 people including dependents. The project will not have any physical displacement of people.

Other potentially negative impacts relate to the construction period. These impacts can be mitigated. During the construction phase, the main environmental risk will be associated with the management and control of temporary risks emanating from excavation works under Component 1. These risks include dust and noise emission from heavy construction machinery and equipment, handling and disposal of spoil from construction waste, erosion and sedimentation of water bodies, sludge management generated from the water treatment facilities and occupation/community health and safety issues.

The involvement of workers from other parts of the country, although limited due to focus on hiring local, may lead to increased stock theft, social conflict, disease transmission and GBV/sexual harassment. These will be mitigated through additional clauses to be incorporated in the contracts with regards to good practice note on addressing GBV in IPF involving major civil works, WBG General EHS Guidelines, such as Code of Conduct, action plans and awareness raising activities and training on GBV and HIV/AIDS prevention for the contractor’s workers and community residents, and Code of Conduct and action plan on child labor. In each beneficiary community, the project’s social specialist and community liaison officers will work with existing community leaders to establish gender-balanced monitoring committees.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:
The long term impacts of having access to a reliable supply of safe potable water supply resulting from the project are expected to be positive impacts that would significantly contribute to overall human development in the area, including aspects such as the health and productivity of the population in the service area. Specifically, the project is expected to contribute to reducing morbidity due to waterborne diseases among people that will gain access to improved water supply, and to broader economic development in the area due to increased productivity of households as people would need to invest less time in accessing water and focus on more productive use of their time. Improved health and productivity of the population is also expected to indirectly contribute to broader human development benefits such as for instance enrollment of children in educational institutions as households become more productive.

The project, however, may cause the drying up the Hlotse river that would result to the non-maintenance of the environmental flow. This would have adverse significant impacts on the aquatic ecosystems and downstream users. This is going to happen if the expansion of the system is not accompanied by a development of a new water source to augment the flow of the Hlotse river during low flows and dry season. It is important to take this impact into account when contemplating of expanding the water supply system.
3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

The following project alternatives were analyzed:

- Water Supply: Different water supply options were considered – due to environmental, social and technical problems associated with abstraction of water from perennial rivers – Hlotse River was the preferred water supply option for the scheme.

Intake Sites: The suitability of each site was measured or evaluated against the following specifications: Suitability of the site for abstraction, proximity of a good water treatment works (WTW) site, water quality of the river, availability of a rock foundation, and access to the site for construction and maintenance. The preferred site for the Hlotse Intake was selected on the basis that: It was well located on the outside of the river bend, it had good rock foundation, there was scour channel erosion in the river bed which is a good indication of its suitability, and it was close to a good water treatment plant site.

- Pump Station: Two possible pump station technology alternatives were considered, wet well and dry well. Although the wet well pump station was found to be less desirable from a monitoring and maintenance perspective, its significantly lower cost outweighed the primary constraint, thus was selected as the best option. It was recommended that high-quality submersible pumps would have to be used with effective monitoring systems to give warning of any potential damage. The proposed submersible pumps in the intake were designed to deliver raw water directly to the inlet of the water treatment plant.

- Pipeline Route No alternatives were identified or proposed for the pipeline route, however the following technical, social and environmental factors were taken into account in the final decision of the pipeline route: Existing road servitudes – where practical and economically feasible the pipeline follows the route of existing roads, outside the boundary of the road reserve. This reduces the need for land appropriation and improves access to the pipeline during construction and for maintenance purposes, Topography – due to sharp relief in the study area and the fact that the proposed scheme relies on flow by gravity, the topographical aspects were taken into consideration in the selection of the pipeline alignment; Proximity to Water Treatment Works site – Ideally a treatment works must be located close to the raw water source where the water is pumped. Thus, this also influence the alignment of the pipeline. Ground conditions – excavation costs and requirements for bedding material and degree of compaction is dependent on the ground conditions and / or geotechnical properties of the soils. This factor was therefore one of the key determining facts for the selected pipeline route.

- Reservoir Location The site selection for reservoirs was determined on the basis of the following criteria: Topography / slope; Future plans for the site; Geotechnical suitability; Available area for all infrastructure; Social sensitivity of the site; Environmental sensitivity of the site; Political sensitivity of the site; and Accessibility to the site.

- Without Project Alternative: The “Without Project” alternative will have no impacts on the biophysical environment, as it will remain unchanged if the proposed development does not go ahead. However, from a socio-economic perspective, this option would have a significant negative impact as the need to meet the water demands of Lowland settlements will not be achieved. Constrained water supply would not propagate health improvement

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

The Borrower has prepared the following instruments to address and manage social and environmental risks
associated with the project:

a) ESIA and ESMP. The Borrower has prepared a stand-alone ESIA and associated ESMP for identified Components 1 activities, including the water intake and treatment works and the water transmission main. A comprehensive Social Assessment was carried out as part of the ESIA.

b) ESMF. An ESMF has been prepared for activities that have not yet been fully identified or designed, including the water distribution network.

(c) Grievance Redress Mechanism: A grievance redress mechanism will be established prior to commencement of construction works to ensure that complaints regarding the Project’s environmental and social performance by the affected people and other stakeholders are promptly addressed.

(d) Social Assessment (Comprehensive Social Assessment as part of the ESIA). Given the prevalence of HIV/AIDS in Lesotho, relative high occurrence of gender-based violence and teenage pregnancies the project will engage communities and project workers, as part of the existing community engagement model, to provide appropriate guidance and education. In addition, as part of planning for activities under each component, the relative labor influx will be assessed and where needed, actionable labor influx management plans will be developed to mitigate any adverse impacts on the host communities.

(e) A Resettlement Policy Framework (RPF) has been prepared for activities that have not been fully identified, including but not limited to the water distribution network. A Resettlement Action Plan (RAP) was also prepared for identified activities, including the water intake, treatment plant and transmission line. An update to the RAP will be prepared prior to commencement of the works to validate the entitlement framework for compensation of project affected persons before compensation payments are disbursed.

f) A Gender Based Violence Action Plan will be prepared for the project.

The safeguard instruments provide guidance on mitigation, management and monitoring which will serve to identify potential impacts early and adjust management throughout the project implementation period. Key measures to address two main impacts identified in Section 1 above are as follows:

(i) Impacts on water quantity and quality as well as on aquatic ecosystems. These impacts will be addressed through measures relating to environmental flows necessary to maintain the hydrological integrity of the river. The ESIA proposes setting up an operating rule that will restrict water abstractions during the periods of low flows especially during the drought seasons to ensure the minimum river flows are maintained. The findings are based on a comprehensive Instream Flow Assessment carried out in 2008. Provisions have been included under the project to support carrying out a comprehensive IFA based on updated data, a decision support system to monitor the implementation of the EFRs and ensure an appropriate adaptive management framework capable of modifying operations to ensure sustainability of the downstream environment.

Component 1 will rely on releases from the Katse Dam during the dry season to augment flows. Accordingly, it would rely on the performance of that dam in releasing agreed amounts. The releases are governed by the existing Lesotho Highlands water Program (LWHP) Treaty and protocols which allow for storage and draw down of water by Lesotho from the LHWP system through the Hlotse Adit into Hlotse River. Annually the Government of Lesotho can draw down up to 5 MCM from the storage of which up to 75% (3.75 MCM) can be released into Hlotse River, with the remaining
25% allocated to the environment flows of the Muela River. The treaty also allows accumulation or banking of unused annual allocation up to a maximum storage of 15MCM which can be drawn down when required. The draw down is through releases from Katse Dam via a tunnel connecting to Muela dam – Hlotse Adit.

ii) Initial GBV risk assessment is low to moderate. The project will therefore support in implementation of citizen engagement (CE) mechanisms, GBV management and mitigation, and HIV/AIDS and gender-targeted activities. This will include the following, inter alia: (i) behavior change and awareness raising activities on HIV/AIDS prevention among beneficiary communities to address the limited knowledge on HIV/AIDS and reduce discrimination and stigma towards HIV affected people; (ii) awareness raising and behavior change training activities among female and male beneficiaries on GBV prevention, care and reporting mechanisms (iii) establishment of gender-balanced monitoring committees in each beneficiary community to facilitate continuous dialogue and collaboration between communities, COW and the contractor; and (iv) development of CE and grievance redress mechanisms to allow beneficiaries to report feedback and concerns associated with the implementation of proposed Project activities and collaborate toward its improvement.

Borrower Capacity to manage safeguards

A dedicated Project Implementing Unit (PIU) has been established within the Ministry of Water, under the office of the COW. There is a qualified Environmental Safeguards Specialist in the LLWSS who will also work on the new project as the Environmental Specialist. A qualified Social Safeguards Specialist with experience from the previous Metolong Project has also been selected. Further strengthening activities will be carried out through training during the implementation stages of the project to ensure that Bank Safeguards policies are properly applied, and the project activities are monitored in accordance with applicable World Bank Safeguards Policies. The Social team will also include citizen engagement officers, compensation and community liaison officers. Additional staff will be hired to complement the core team of Safeguards staff in line with roles outlined in the ESIA Addendum. Some of the additional roles will be carried out with support from the Project Management Consulting Firm (PMC) which will also have specialists with environmental and social expertise.

Client's capacity to respond to GBV will be assessed prior to commencement of construction activities. The project will collaborate with already existing GBV Services Provider(s) and/or community-based organizations to support the project in addressing any case of GBV that may arise.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

As part of the preparation of the ESMF, ESIA, RPF and RAP, a broad spectrum of stakeholders were consulted, including local Government officials, traditional chiefs and local traditional authorities, local NGO’s, including DPO’s, women’s groups, herders associations and project affected communities. The mechanisms for consultation included inception workshops, public gatherings, focus group discussions and key informant interviews. They key safeguards instruments i.e. the ESMF, ESIA, RPF and RAP have been disclosed.
B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other

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<th>Date of receipt by the Bank</th>
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<th>For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors</th>
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"In country" Disclosure
Lesotho
06-Feb-2019

Comments

Resettlement Action Plan/Framework/Policy Process

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"In country" Disclosure
Lesotho
06-Feb-2019

Comments
Borrower re-disclosed on 20th March 2019.

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?
Yes
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?
Yes
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?
Yes

OP/BP 4.04 - Natural Habitats

Would the project result in any significant conversion or degradation of critical natural habitats?
No
If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?

Yes

OP/BP 4.11 - Physical Cultural Resources
Does the EA include adequate measures related to cultural property?

Yes
Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?

Yes

OP/BP 4.12 - Involuntary Resettlement
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?

Yes
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?

Yes

OP/BP 4.37 - Safety of Dams
Have dam safety plans been prepared?

Yes
Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?

Yes
Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?

Yes

OP 7.50 - Projects on International Waterways
Have the other riparians been notified of the project?

Yes
If the project falls under one of the exceptions to the notification requirement, has this been cleared with the Legal Department, and the memo to the RVP prepared and sent?

NA
Has the RVP approved such an exception?

NA

The World Bank Policy on Disclosure of Information
Have relevant safeguard policies documents been sent to the World Bank for disclosure? 
Yes

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?
Yes

All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies? 
Yes

Have costs related to safeguard policy measures been included in the project cost? 
Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies? 
Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents? 
Yes

CONTACT POINT

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APPROVAL

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<th>25-Mar-2019</th>
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<td>Country Director:</td>
<td>Emmanuel Noubissie Ngankam</td>
<td>28-Mar-2019</td>
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