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

Appraisal Stage | Date Prepared/Updated: 10-Dec-2018 | Report No: PIDISDSA24435
## 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>
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<tbody>
<tr>
<td>Brazil</td>
<td>P165683</td>
<td>Paraiba Improving Water Resources Management and Services Provision</td>
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<table>
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<th>Practice Area (Lead)</th>
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<td>07-Dec-2018</td>
<td>28-Feb-2019</td>
<td>Water</td>
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<thead>
<tr>
<th>Financing Instrument</th>
<th>Borrower(s)</th>
<th>Implementing Agency</th>
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### Proposed Development Objective(s)

To (i) strengthen capacity for integrated water resources management in the State; (ii) improve reliability of water services in the Agreste and Borborema regions; and (iii) improve the operational efficiency of water and wastewater services in the Joao Pessoa Metropolitan Region.

### Components

- Integrated Water Resources Management
- Improved Water and Sanitation Services Reliability and Efficiency
- Contingent Emergency Response (CERC)

## PROJECT FINANCING DATA (US$, Millions)

### SUMMARY

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (in Millions)</th>
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<tr>
<td>Total Project Cost</td>
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<td>Total Financing</td>
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<td>of which IBRD/IDA</td>
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<td>Financing Gap</td>
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### DETAILS
B. Introduction and Context

Country Context

1. **Between 2003 and 2013 Brazil experienced a ‘Golden Decade’ of rapid growth and social progress.** Sound macro policies and a favorable external environment contributed to fast economic growth which averaged 4.5 percent per year between 2006–10. This growth was accompanied by an unprecedented reduction in inequality as evidenced in the fact that an estimated 24.2 million Brazilians were lifted out of poverty and in the attendant reduction in the Gini Coefficient of household incomes from 0.59 to 0.51. The road to prosperity for most Brazilian poor was provided through formal sector jobs which spurred a sharp decline of the unemployment rate to a low of 6.8 percent in 2014.

2. **Poverty decreased fastest in the North and Northeast – the poorest regions of Brazil** – which saw a 28.0 percentage point decline in the poverty headcount, compared to a decline of 10.3 percentage points in the Southeast. The income level of the B40 rose, on average, 7.1 percent (in real terms) between 2003 and 2014. Access to social services and basic infrastructure, including, among others, water and sewage also increased significantly thanks to a combination of additional resources and better management.

3. **However, the deterioration in both the external environment and domestic policies gave way to a steady decline in growth which, by 2015, engulfed the country in a deep recession.** Moreover, growth, which averaged 4.5 percent per year in 2006–10 declined to 2.4 percent between 2011–14, and contracted 3.8 percent and 3.6 percent in 2015 and 2016, respectively. While external factors triggered the slowdown, an expansionary policy response led to rapidly rising fiscal disequilibria and, with rising domestic political uncertainty, a loss of confidence and sharp drop in investment. In addition, the economic crisis precipitated a rapid rise in unemployment between 2015 and 2016 during which time over 3 million Brazilians lost their jobs, pushing
unemployment to 12.4 percent by September 2017 (almost doubling the 6.8 percent rate of 2014). Average real wages declined by 0.3 percent in 2015 and 2.3 percent in 2016. This considerable rise in unemployment and reduction in real wages renders past progress in poverty reduction at risk of being reversed.

4. **Poverty rates vary substantially across regions.** This range varies from 43 and 45 percent in the states in the North and Northeast respectively, where poverty is concentrated, to less than 15 percent in the states in the South, against the national average of 25.4 percent. An estimated 11.2 percent of the inhabitants of the North and 12.9 percent of the population of the Northeast live in extreme poverty (c.f. the 6.5 percent national average). In absolute numbers, over 7 million Northeastern Brazilians live under the extreme poverty line, more than half (54.1 percent) of the total extreme poor in the country.

5. **Since 2015, the Brazilian Government has embarked on a fiscal adjustments program and a reform agenda aimed at restoring investor confidence and a favorable investment environment going forward.** As a first important step to restore fiscal sustainability, in December 2016 Congress approved a constitutional amendment to limit the growth of public expenditures\(^1\) which has, since 2017, set the country back on a path of economic growth, (1.0 percent), although the pace of recovery is expected to remain slow.\(^2\) Brazil’s medium-term outlook will depend on the success of current adjustments and the enactment of growth-enhancing reforms. Growth will need to be based on higher investment and productivity gains.

6. **Brazil must overcome important infrastructure challenges if it is to spur sustainable growth.** Since the 1980s, investment in infrastructure has declined from over 5 percent to just under 2 percent of GDP, which is insufficient even to cover depreciation. Over the same period, it has struggled with stagnant productivity growth and the poor status of infrastructure is widely believed to be a key reason for Brazil’s growth malaise (SCD, World Bank, 2016a). While there has been no shortage of national flagship programs targeting infrastructure, their impact has been disappointing. Brazil has neither been able to substantially raise its total rate of investment in infrastructure, nor has quality of services improved. It will need to substantially increase the efficiency of infrastructure spending to close the gap and this will require rebuilding its capacity for planning, budgeting and managing infrastructure assets. This also holds true for water-related infrastructure. While public funding will remain constrained by Brazil’s ongoing fiscal adjustment, private investment is unlikely to be an effective substitute unless infrastructure governance improves. However, with appropriate policies, institutions and regulations in place, substantial gains in infrastructure performance could be achieved because of efficiency gains coupled with public investments.

**Sectoral and Institutional Context**

7. **The State of Paraiba is among the poorest states in Brazil with considerable regional economic disparities.** Paraiba State, located in the northeast of Brazil, has a total population of about 4 million inhabitants with a population density of 71.29 inhabitants per kilometer square (km\(^2\)), with is ninth in Brazil. In 2016, Paraiba’s GDP was R$ 59 billion and the per capita income BRL 14,774 (around US$4,000), the fourth lowest in the country. The State is second among northeastern states in terms of income inequality, with a GINI of 0.501. Paraiba’s Municipal Human Development Index of 0.701, which ranks 22 out of 27 states. About half of the

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\(^1\) The constitutional amendment (PEC 241) was approved by the Brazilian Senate in December 2016. It limits the growth of the Federal Government’s public expenditures, corrected by inflation, for up to 20 years. Limits for the education sector take effect starting in 2018.

\(^2\) Organization for Economic Co-operation and Development (OECD), Economic Outlook 2017: Brazil economic forecast summary (June 2017).
population in Paraiba State lives below the poverty line, with an estimated 10 percent living in extreme poverty. Population distribution throughout the territory is quite irregular and 53 percent of the people live in the metropolitan regions of João Pessoa, Campina Grande and Patos. These regions account for about 55 percent of the State’s economy, mostly in the commerce and services sectors, responsible for 73 percent of the State’s GDP.

8. **The State of Paraiba suffers from water scarcity in the interior and floods along the coast.** Although home to a fifth of total world freshwater resources, Brazil’s contrasting climates, population densities, and development patterns have resulted in wide differences in availability and demands for water. The Northeast of Brazil has been a historically water-scarce region and is suffering one of its worst droughts since 2012, which is severely affecting Paraiba. Uncontrolled urban growth is further impacting scarce water resources and the quality of water is deteriorating due to pollution. At the same time, floods are frequent during the rainy season. Climate scenarios predict increasing vulnerability to droughts in the interior and more intense rains and floods along the coast in the Northeast, where João Pessoa metropolitan area is located.

9. **Current infrastructure is not designed to respond to increasingly extreme climate events.** Improving resilience requires a combination of structural and non-structural measures based on risk assessment and climate uncertainties. Paraiba State, like other states in the Northeast, has been developing infrastructure to secure water for human and agriculture consumption, including livestock in semi-arid regions. However, these investments are insufficient to address the growing problems of water scarcity. The State continues to be very vulnerable to droughts, especially in rural areas. At the same time, Paraiba is also vulnerable to floods, particularly in the coastal area. The state needs to invest in better weather forecasting, improve management of multi-purpose reservoirs and upstream dams and capacity building.

10. **Water resources management is not a strategic priority and not fully valued by water users.** There is no coherent policy to manage water involving all strategic sectors, such as agriculture, energy, environment, urban water supply sanitation and land use. Managing water in a large federative country like Brazil is a complex task. Many organizations are involved in managing water resources depending on whether these involve international waters, inter-state rivers, local water resources or groundwater. To increase complexity, several river basins include federal rivers, state rivers and small tributaries, resulting in the so-called double domain. This situation also imposes considerable challenges to the joint action of the Federal Government and States. In principle, water management must be decentralized and done in a participatory manner at the river basin level. This problem is clear in Paraiba State where the federally managed São Francisco River, which crosses several states, has become one of the main suppliers of water in the semi-arid region through the recently finished São Francisco water transfer project.

11. **Institutional complexity is compounded with increasing water scarcity and prolonged droughts.** Water crises have exposed the constraints of the current water resources management system and the costs of these events are growing and are likely to become more expensive and difficult to solve if water resources management is not strengthened. Water management organizations in Paraiba lack the financial resources as well as qualified personnel to effectively fulfil their roles and use resources efficiently. The management and rational allocation of water to different uses is not optimized, and responsible agencies are not performing well. The State Water Agency (AESA) needs to strengthen its technical and managerial capacity and develop more

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effective tools to assess, allocate and monitor water uses within the State and ensure water flows are maintained to sustain freshwater and estuarine ecosystems and human livelihoods downstream. The approved water tariff regulation, for example, has yet to be fully implemented due to administrative and political difficulties. Moreover, the State’s environmental, water resources, and WSS plans and procedures are not coordinated with each other.

12. **Water pollution has also emerged as a major challenge for water security, especially in urban areas.** Rapid and irregular urbanization and the lack of water supply and sanitation (WSS) systems have increased the discharge of untreated wastewater. Lack of proper collection and disposal of solid waste management has further contributed to environmental pollution problems. The current water coverage is estimated at 82.5 percent, while only 48.6 percent of the sewerage is collected and only 39 percent is treated (SNIS, 2014). As a result, much of the wastewater is either discharged untreated or collected in unregulated septic tanks with severe impacts on water quality. The unwillingness of households to pay for connections and sewerage service, along with inadequate enforcement of relevant regulations continue to encourage uncontrolled discharges.

13. **The Water and Sewerage Company of Paraiba (CAGEPA) is responsible for water and sanitation services in 92 percent of the municipalities in the state.** The Water and Sewerage Company of Paraiba (CAGEPA) is responsible for water supply in 195 out of 223 municipalities in the state, while CAGEPA only operates sanitation systems in 22 large municipalities, of which 89 percent is treated. Frequent failures and overflows of elevation stations, result in the pollution of freshwater resources and beaches as well as clogging of drainage systems. The current tariff only covers operational and maintenance costs, requiring government support to finance capital investments. Without investment capacity and lack of proper asset management the existing infrastructure keeps deteriorating. Although Paraiba’s Regulatory Agency (ARPB) is responsible for regulating the water supply and sanitation services, it does not fully fulfill its mandate as required by the federal legislation. Although the institutions have clear roles and responsibilities, their capacity of these institutions depends heavily on the availability of financial. This will become an even bigger challenge given the strict limits on state expenditures, imposed by the Fiscal Responsibility Law, and the lack of coordination among institutions to identify synergies and create opportunities to join forces.

### C. Proposed Development Objective(s)

**Development Objective(s) (From PAD)**

To (i) strengthen capacity for integrated water resources management in the State; (ii) improve reliability of water services in the Agreste & Borborema regions; and (iii) improve the operational efficiency of water and wastewater services in the Metropolitan area of Joao Pessoa.

**Key Results**

6 For the purpose of this project a reliable water system provides water in more than 80 percent of days per year.

7 For the purpose of this Project, operational efficiency will be measured by NRW for water supply and pollution load in terms of BOD for wastewater.
The main expected results are:

a. Annual operational water management plan of the Paraiba river is issued by AESA;
b. Number of hydro-meteorological stations operational and feeding into the water information system;
c. Number of beneficiaries with reliable water services in the Agreste and Borborema regions;
d. Number of days with piped water per year in ) in the benefitted cities of the Agreste and Borborema regions;
e. NRW reduced in the João Pessoa Metropolitan Region; and
f. Volume of pollution load (BOD) discharges reduced in water bodies bodies in the João Pessoa Metropolitan Region

D. Project Description

14. The proposed Project is a US$207.1 million IPF operation financed by a US$126.9 million IBRD loan and US$80.20 million of counterpart funds. It comprises the following components (see Annex 2 for more details):

15. **Component 1: Integrated Water Resources Management (US$ 11.1 million).** This component will support strengthening the institutional capacity for water resources management and meteorological and hydrological monitoring and forecast and increasing the resilience of water supply systems to climate-related events and reduce the vulnerability of residents to droughts and floods. The component includes the following subcomponents:

   a. **Subcomponent 1.1. Improving Water Management (US$ 7.5 million).** This subcomponent will finance technical assistance to AESEA to improve governance capacity, operations and monitoring of water resources and the implementation of water resources management instruments. These activities are based on the action plan prepared by the Bank financed NLTA. This subcomponent will help improve policy instruments regarding water pricing, allocation and demand management, as well as expanding the hydro-meteorological network and forecasting capacity. Training activities will be organized to improve staff capacity as well as the effectiveness of river basin committees and other citizen organizations.

   b. **Subcomponent 1.2. Project Management and Institutional Development (US$ 3.6 million).** This subcomponent will help strengthen the capacity of the institutions involved in Project Management and Implementation and ensure financing of the Project Management Unit (PMU), located in SEIRHMACT. It will also support activities to improve the safety of four existing dams upstream of the Curimataú and Cariri water supply systems. The subcomponent will also finance pre-feasibility studies of proposed dams in in the Piranhas-Açu River Basin, located in the Sertão region of the State. Finally, the subcomponent will support activities to strengthen key government agencies involved in the water sector, including the Superintendence of Environmental Management (SUDEMA), the State Regulatory Agency of Paraiba (ARPB) and the General State Controller’s Office (CGE).

16. **Component 2: Improved Water and Sanitation Services Reliability and Efficiency (US$195.68 million).** This component will help increase the reliability of water supply and the resilience of services to extreme drought events in water scarce regions. The component will reduce the contamination of scarce water resources in the JPMR by improving the sanitation system and reduce overflow risks. The component will also invest in improving the operational efficiency of CAGEPA. The component includes the following subcomponents:
a. **Subcomponent 2.1. Water Infrastructure in the Agreste and Borborema Regions (US$161.0 million, US$80.8 million IBRD financing).** This subcomponent will finance the Transparaíba water supply systems, which will bring water from the São Francisco River transfer canal to 27 municipalities in the water scarce Agreste and Borborema and Regions. It is comprised of the subsystems: the first phase of the Curimataú Water Supply System, fully financed with counterpart funds; and Cariri Water Supply System, financed by the loan. Investments include water intakes, treatment plants, water mains, pumping stations and service reservoirs. In terms of climate benefits, the subcomponent will simultaneously improve resilience to droughts as well as reduce fuel consumption and related GHG emissions from water trucks currently supplying water during the dry season.

b. **Subcomponent 2.2. Water and Sanitation in João Pessoa Metropolitan Region (JPMR) (US$ 34.68 million).** This subcomponent will improve the efficiency of water and sanitation services in the João Pessoa Metropolitan Region. Investments in the existing sewerage system, include new interceptor, expansion and modernization of elevation stations and pressurized lines to reduce pumping needs and increase energy efficiency. The subcomponent will also invest in the rehabilitation and expansion of the largest treatment plant in the city. Methane gas capture from the anaerobic lagoons is being considered to generate electricity for the facility. The subcomponent will also support CAGEPA in improving water supply efficiency, by reducing non-revenue water and increase energy efficiency. The subcomponent will also help improve the management capacity and operational efficiency of CAGEPA through technical assistance, including the preparation of a modernization plan, and the development and implementation of an environmental and social risk management system with participatory mechanisms.

17. **Component 3: Contingent Emergency Response (zero budget).** This zero-cost component will be available to support rapid response activities following a formal declaration of an eligible crisis or emergency. Loan proceeds can be reallocated from other components to eligible activities, such as emergency rehabilitation works, provision of critical equipment, or any other critical inputs to ensure the continued operation of water and sanitation infrastructure and services. Streamlined procurement and disbursement procedures will be used to expedite disbursements. The Contingency Emergency Response (CER) Section of the Project Operational Manual provides more specific guidelines.

### E. Implementation

**Institutional and Implementation Arrangements**

18. The Borrower will be the State of Paraiba. To coordinate the “Improving Water Resources Management and Services Provision in the State of Paraiba” project in its different stages, a PMU would be created reporting directly to SEIRHMACT. This unit will consist of three technical coordination centers, representing SEIRHMACT, AESA and CAGEPA, respectively.

19. Each technical coordination center would have its specific function, as follows:

a. **SEIRHMACT:** Project Supervision and Management, as well as the implementation of the studies and actions to support institutional development of the Secretariat and of SUDEMA and ARPB, and studies of the proposed dams (subcomponent 1.2);
b. AESA: coordination of most water resources management activities involved under Component 1 (subcomponent 1.1);

c. CAGEPA: coordination of most activities involved under Component 2, except the activities under the auspices of SEIRHMACT.

20. Procurement will be centralized in the PMU/SEIRHMACT, while contract management will be decentralized by implementer. The PMU/SEIRHMACT will also centralize FM arrangements. Implementation of social and environmental safeguards management will be decentralized to PMU/SEIRHMACT (Component 1) and CAGEPA (Component 2).

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

Located in the Brazilian Northeast Region, the Paraiba State is known by severe and cyclical drought periods. The State can be divided into four zones with different physiographic conditions: Mata (Coastal), Agreste, Borborema and Sertão Zones. The Mata (Coastal) Zone has a tropical humid climate, with abundant rainfall and distinct biotic characteristics. The vegetation in the area includes localized spots of mangroves, resting, and Atlantic Forest. The capital city of Joao Pessoa is located in the coast besides the estuary of the Paraiba river. The population of its metropolitan areas is above 1.1 million people. Two-thirds of the wastewater collected in the region is treated in an existing 40 years-old obsolete treatment plant, discharging in the estuary. The project will support the expansion and improvement of the wastewater conveyance and treatment systems. The Aeste, Borborema and Sertão Zones compose the state’s semi-arid region, where the Caatinga is the dominant vegetation. The annual rainfall in this region ranges 200-800 mm/year. The semi-arid region occupies 87 percent of the state, 76 percent of the 223 municipalities and has the lowest availability of water per capita in the country. Nearly 10 percent of the 4.03 million inhabitants of the State of Paraiba lives in the 38 municipalities benefitted by the Transparaíba Water Main. Levels of poverty remain high: 13.4 percent of the population live below the extreme poverty line, 28.9 percent below the poverty line and about 54 percent were vulnerable to poverty. These rates are worse in the municipalities benefitted by the Transparaíba Water Supply System: below extreme poverty line ranging 9.0-37.0 percent, below poverty line ranging 24.3-55.9 percent, and vulnerability to poverty ranging 50.4-77.2 percent. Several communities are currently supplied by water trucks. In João Pessoa, Cabedelo e Conde, the extreme poverty rate reaches 3.5, 5.3 and 13.5 percent, respectively. Climate variability is considerable at both early and decade bases, but water scarcity and prolonged droughts are the major hurdles for the development. Climatic conditions worsened since 2012, beginning of the ongoing drought period. The TransParaíba water supply scheme will draw directly from two reservoirs controlled by existing dams, Epitácio Pessoa (Curimataú water supply system) and Poções (Cariri water supply system) dams, and involve two other dams upstream of the dams with intakes (Camalau and Sao José II).
**G. Environmental and Social Safeguards Specialists on the Team**

Alberto Coelho Gomes Costa, Social Specialist  
Maria Bernadete Ribas Lange, Environmental Specialist  
Augusto Ferreira Mendonca, Environmental Specialist

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**SAFEGUARD POLICIES THAT MIGHT APPLY**

<table>
<thead>
<tr>
<th>Safeguard Policies</th>
<th>Triggered?</th>
<th>Explanation (Optional)</th>
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<tbody>
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<td><strong>Environmental Assessment OP/BP 4.01</strong></td>
<td>Yes</td>
<td>The proposed Project will consist of: (i) technical assistance - including the improvement of the policies and strategies of the State of Paraíba, progress of the legal and organizational framework of the Water Resources and Sanitation sectors, institutional strengthening, support the use of new technologies and information management and pre-feasibility studies of proposed dams; and (ii) investments in water infrastructure and sanitation works, including the Transparaíba Adductor System (Cariri and Curimataú branches), the improvement of the water supply and the expansion and modernization of the Sanitary Sewage System of the municipalities of João Pessoa, Cabedelo and Conde. The Project will, also, fund studies and minor rehabilitation works looking to improve the safety condition of four existing dams, related to the Transparaíba water supply scheme: the Epitacio Pessoa Dam (535 million m3 capacity), the Poções Dam (30 million m3 capacity), the Cumalau Dam (46 million m3 capacity), and the São José II Dam (1.3 million m3 capacity). The proposed Project also includes a Contingency Emergency Response Component (CERC) - The CERC would support possible disaster recovery needs in Paraíba water and sanitation systems. It may finance goods and services to ensure the continued operation of the water supply and sanitation infrastructure, training, and operating costs in the event of a natural disaster. Eligible activities may include emergency rehabilitation works, provision of critical equipment, or any other critical inputs to</td>
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ensure the continued operation of the water supply and sanitation infrastructure. The CERC activation should be done through formal declaration of a state of emergency or at the formal request of the GoP following a disaster. It shall be based in an Emergency Action Plan. In case of CERC activation, the following elements will be considered: (i) confirming which activities can proceed, with no additional environmental or social assessment and which ones require assessment prior to being initiated; (ii) rapidly assessing the environmental and social baseline of planned CERC activities and location; (iii) preparing specific safeguards instruments, including, as necessary, mobilizing, consultation, stakeholders engagement, institutional arrangements, monitoring and evaluation procedures and estimating the costs for safeguards preparation and implementation. If the CERC activities would result in potentially significant negative social or environmental impacts, a formal review of project safeguard category will be required.

Despite the diversity of activities to be supported by the Project and the scale of the TransParaiba water system, the foreseen potential adverse environmental impacts are site-specific and mainly temporarily. Most proposed activities will be developed in altered areas and most impacts during the construction phase can be properly mitigated. Additionally, the proposed interventions in João Pessoa may have net positive impacts on the local ecosystems, reducing raw wastewater spillovers and minimizing/mitigating the disposal of the wastewater treatment plant effluents on the Paraiba River estuary and mangroves. Potential adverse environmental impacts on natural areas or environmentally important areas – including mangroves – are site-specific and in most cases mitigatory measures can be readily designed to minimize or mitigate impacts as well as to improve environmental performance of the wastewater system already implemented.

The PISF is crucial for the development and resilience to droughts of the Northeast region, in general, and the State of Paraiba, in particular. Several studies have already been done on the
subject and concluded that the water transfer project creates a more sustainable environment in the region and improve resilience to prolonged droughts, which may be aggravated by climate change.

Adaptation to climate change is closely linked to water and its role in sustainable development. With the objective of improving water security and increasing resilience in the sector, it is necessary to put into practice several adaptive measures that deal with climatic variability, in line with existing water management practices. The project has been developed specifically to increase local water sector resilience to climate-induced shocks, especially drought in the semiarid but also floods in the coastal area. The potential climate-related benefits from Project’s components involve: (i) improvement of water security and water resource management instruments, including better water allocation in wet and dry periods; (ii) increased water reliability of urban centers in the Agreste and Sertão regions, areas most affected by water scarcity and supply rationing; (iii) improvement of wastewater services in the city of João Pessoa by the restructuring/upgrading of João Pessoa’s wastewater system, which will reduce sewage overflows from heavy rains and energy demand, by using more efficient pumping and transmissions lines as well as capturing methane in the wastewater treatment plant to generate energy and supply the facility’s demand.

As part of the process of preparation and analysis of the PSH/PB and in accordance with the World Bank project financing procedures, it was made a screening of the type of activities proposed, their location, scale and magnitude and their potential direct and indirect socioenvironmental impacts. An institutional capacity assessment of the implementing agency for management of social and environmental risks was also carried-out. Based on the assessment of potential environmental social risks and impacts, a Category B was agreed for the Project.

The conceptual engineering design and location studies of the Cariri water main and the expansion of wastewater services in the city of João Pessoa are at
initial stage. Their impacts cannot be determined until the location and engineering design details have been identified. An Environmental and social Management Framework (ESMF) was prepared, publicly disseminated and consulted prior to appraisal.

Meanwhile, the first section of the Curimatau water main is at a more advanced stage, its preliminary engineering design has been concluded and its preliminary environmental license issued (LP 1564/2017 issued in July 2018 by the Paraiba State Environmental Agency – SUDEMA). An Environmental Management Plan (EMP) for this work was prepared, publicly disclosed and consulted prior to appraisal. This EMP includes the measures to be taken during the implementation and operation of the water main to eliminate or offset adverse environmental impacts, including an environmental monitoring program and a reclamation plan among other mitigation measures.

The Environmental and Social Management Framework (ESMF) includes a section on the CERC, including the types of activities likely to be financed and evaluates the potential risks and mitigation measures associated with them. Given the uncertainties and rapid changes inherent in emergency situations and responses, the ESMF designs around a flexible “adaptive management” approach, with emphasis on monitoring of key outcomes and mechanisms.

The following environmental and social management instruments will be prepared during the implementation phase of the Project: (i) Environmental and Social Management Plan of the Transparaíba – Cariri Branch; (ii) Environmental and Social Management Plan for Expansion of the Sanitary Sewage System of the municipalities of João Pessoa, Cabedelo and Conde; and (iii) Environmental and Social Management Plan for the distribution system for water supply systems in the cities of Cabedelo, João Pessoa, Bayeux and Várzea Nova. In the case of activation of Component 3 - Contingency and Emergency Response, the need for additional measures for the socio-environmental management of the activities supported by this component will be analyzed.
Regarding the Expansion of the Sanitary Sewage System of the municipalities of João Pessoa, Cabedelo and Conde, preliminary assessments indicate the following potential impacts: (i) water pollution, including pathogens and chemicals; (ii) changes on natural drainage system; (iii) cross-media transfers of contaminants during treatment, including air, soil and water.

The ESMF will guide the preparation of a full Environmental and Social Impact Assessment (ESIA) during project design. The ESIA shall include an analysis of alternatives given the potential changes to treatment system, energy capture potential, outfall considerations and the sensitive social context within the city neighborhood. Its preparation will also be prepared based on the WBG General and Water and Sanitation Environmental Health and Safety Guidelines (EHS Guidelines).

The Transparaíba Water System comprises: (i) the water intake in existing reservoirs, (ii) the water treatment plant, (iii) the water mains (bulk and treated), (iv) elevation stations and (v) service reservoirs in benefiting cities. There are no interventions in the existing water distribution networks, because the treated water will flow from the services reservoirs constructed under the project to households through the existing water distribution network.

The project will also track the overall water balance and cumulative impacts of infrastructure and water use in the Paraiba River Basin, if any. The Water Resources Plan for the Paraiba river basin, to be financed under the project, will include requirements for the continuous assessment of cumulative impacts caused by the Transparaíba Water System.

Similarly, the pre-feasibility studies of dams in the Piranhas-Açu river basin will include an assessment of cumulative impacts related with increasing demand and changes in water availability.

The overall envisaged social impacts of the proposed Project activities would be beneficial. Some adverse impacts related with involuntary resettlement are expected due to land acquisition needed for the works related with the (i) implementation of the Transparaíba Water Supply System and (ii) the
expansion of wastewater services in the city of João Pessoa. These impacts will be mostly site-specific. Alternatives of project design are being considered to avoid or minimize these adverse impacts, which tend to be site-specific and only partially affect landholdings, requiring the payment of easement fees. Adverse impacts related with involuntary resettlement were addressed through the preparation of a Resettlement Policy Framework (RPF) and an Abbreviated Resettlement Action Plan for the first section of the Curimatau water main (see details below).

An assessment of the social benefits of project activities was carried-out and provided inputs to the project’s Environmental and Social Management Framework (ESMF). The assessment incorporated a gender sensitive lens and focused on impacts over vulnerable groups and individuals. It shows that access to reliable water sources will benefit a population among which poverty and extreme poverty rates remain very high, contributing to improve health and living conditions.

An institutional capacity of the implementing agency for management of social and environmental risks was also carried-out and pointed out the main aspects of the system of management of social and environmental risks in which the institutional capacity of the implementing agencies have to be improved. The project’s results framework includes an indicator for measuring improvements on this system of social and environmental risks management.

The ESMF and the RPF define the processes and procedures for the operation of a Grievance Redress Mechanism (GRM), which will rely on the structures already in place in the implementing agencies. These include a costumer services in CAGEPA and Ombudsman offices in CAGEPA and SEIRHAMACT, which are integrated with the General Ombudsman Office of the State of Paraíba. These offices and services can be accessed by phone, websites, e-mail addresses and local offices. The capacity of these offices would be evaluated as part of the institutional capacity assessment. Site-specific offices will be opened at the sites of the main civil works, staffed with social workers and broadly
advertised as channels for receiving and redressing complaints. The proposed Project will involve construction of civil works, including labor force and associated goods and services, but no significant labor influx is expected. Nevertheless, the project Environmental and Social Management Framework (ESMF) and bidding documents include specific measures to address labor requirements and performance, assess and manage labor influx risks as well as monitor potential impacts from labor influx. Consultations with key stakeholders, beneficiaries and affected people have been carried out by the Borrower at two moments. A first-round of consultations was carried out to assess and validate the Terms of Reference for carrying out the overarching social and environmental impact analysis and preparing the social and environmental safeguard instruments: the Environmental and Social Management Framework (ESMF) and the Resettlement Policy Framework (RPF). At this round of consultation, 57 representatives of civil society organizations, academia, federal, state and municipal agencies participated in a face-to-face meeting held in February 2018. The meeting recommended the organization of two face-to-face meetings to consult about the draft versions of the ESMF and the RPF – one in each of the areas of intervention (the Metropolitan Region of João Pessoa and the Agreste and Sertão Region). Following this recommendation, the second-round of consultation took place in November 2018 in the cities of Sumé and João Pessoa. At this stage, the consultation process also relied on the public disclosure of the draft versions of the ESMF and RPF through the official website of the Government of the State of Paraíba. In total 84 representatives of public control agencies, federal, state and municipal agencies and authorities, the academia, and the civil society took part in these two meetings (37 in Sumé and 47 in João Pessoa). The scope of the project and its components, the potential social and environmental impacts of its activities (including issues related with land acquisition and involuntary resettlement) and
the measures proposed to avoid, reduce and mitigate them were presented and discussed. The participants approved the measures proposed for social and environmental risk management and raised few questions about the need to include other dry regions in the scope of intervention, to allow the use of water supplied through the Transparaiba System for agricultural purposes and the inclusion of activities related with environmental education for the rational use of water by the beneficiary population. These remarks were answered during the meetings. A full report on the second-round of consultation was prepared and remains publicly available. Further consultations may be required during implementation for the preparation of Resettlement Action Plans and will be considered if the CERC component is enacted and include activities not envisaged during the preparation of the ESMF and ESIA.

Performance Standards for Private Sector Activities OP/BP 4.03

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<th>Policy</th>
<th>Yes/No</th>
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<tr>
<td>Performance Standards for Private Sector Activities OP/BP 4.03</td>
<td>No</td>
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The proposed Project will not support private sector activities. The responsibilities for identifying, assessing and managing environmental and social risks and impacts will be fully owned and operate by the public sector.

Natural Habitats OP/BP 4.04

<table>
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<th>Policy</th>
<th>Yes/No</th>
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<tbody>
<tr>
<td>Natural Habitats OP/BP 4.04</td>
<td>Yes</td>
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</table>

This policy is being triggered as some activities under the proposed Project may have interference on natural mangroves habitats. The ESMF includes criteria and necessary management measures to ensure that potential impacts on sensitive biodiversity areas are considered in the design of the proposed works. Nevertheless, no significant conversion or degradation on natural habitats are expected. Preliminary assessment indicates that overall benefits from the project would substantially outweigh the environmental impacts and appropriate mitigation measures would be incorporated to project design. According to the Brazilian Legislation, the Borrower would have to request previous authorization from the State Environmental Agency to convert natural vegetation and implement activities involving
conversion or degradation of natural habitats. The ESMF includes clear guidance regarding direct and indirect impacts on natural vegetation and habitats. The sanitation works in João Pessoa, (notably the wastewater plant rehabilitation/expansion) may result in direct impacts on the Paraiba River mangrove, a protected and ecologically sensitive ecosystem. The wastewater treatment plant rehabilitation/expansion design will include a comprehensive analysis, demonstrating that overall benefits from the proposed works substantially outweigh the environmental costs, (mainly impacts on water quality and surrounding ecosystems).

Additionally, the engineering studies shall demonstrate that the selected design alternative is the one with lowest impact on natural habitats, and that there were no other feasible alternatives for effluents disposal.

Currently, the water quality in the mangrove area, downstream from the wastewater treatment plant is degraded by the effluents disposal. The wastewater treatment plant rehabilitation may have positive impacts on the water quality and on the health of the mangroves, but may also bring minor changes in the utilization of this ecosystem by the surrounding population.

OP 4.04 was triggered, aiming to assist the client to conduct the mangrove water quality restoration in a sustainable manner, as supporting socially beneficial and economically viable activities associated to the area rehabilitation.

The technical assistance activities and pre-feasibility studies of the sewage treatment facility will consider any potential impacts from increased water use/retention on sensitive ecosystems. In addition, pre-feasibility studies of new infrastructures should consider the mitigation hierarchy regarding critical and natural habitat. The project will also track the overall water balance and cumulative impacts, if any, on sensitive dry ecosystems in the region from the additional infrastructure.

| Forests OP/BP 4.36 | Yes | This policy is being triggered as some activities under the proposed Project may have interference on natural mangroves habitats. Nevertheless, it is not expected that Project implementation will have negative impacts on forest resources. |
The World Bank
Paraíba Improving Water Resources Management and Services Provision (P165683)

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<tr>
<th>Policy Area</th>
<th>Triggered</th>
<th>Details</th>
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<tbody>
<tr>
<td>Pest Management OP 4.09</td>
<td>Yes</td>
<td>The Project will not include activities that require commercial forest harvesting; or utilization of natural forests formations or plantation. The ESMF considers the requirements of OB/BP4.36 whenever restoration activities are being planned, and should be planned and executed in such a way to minimize or prevent negative impacts on natural vegetation areas.</td>
</tr>
<tr>
<td>Pest Management OP 4.09</td>
<td>Yes</td>
<td>This policy is triggered due the potential use of algaeicides to control and/or eliminate green and blue algae from drinking water supply and supply systems. The proposed Project will not include any support for agriculture land use which would promote pest management. The ESMF contemplates the environmental guidelines, in case of use of algaeicides, the products must comply with the national legislation in force. The sanitation works in João Pessoa, (notably the wastewater plant rehabilitation/expansion) will include procedures in case of use algaeicides.</td>
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<tr>
<td>Physical Cultural Resources OP/BP 4.11</td>
<td>Yes</td>
<td>This policy is triggered on a precautions basis, as there is no indication, so far, that the Project works may interfere with known cultural resources. However, the construction works nature (716 long water main) may result in interference with historical and/or paleontological sites. The ESMF includes procedures for screening any known cultural property in the Project area and incorporate ‘chance find’ procedures if culturally significant resources are discovered during the Project implementation. The ‘chance find’ procedures would be defined in accordance with requirements from IPHAN (Instituto de Patrimônio Histórico e Artístico Nacional) and from OP 4.11.</td>
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<tr>
<td>Indigenous Peoples OP/BP 4.10</td>
<td>No</td>
<td>OP/BP 4.10 Indigenous Peoples is not triggered. Focused in the semi-arid regions of Agreste and Borborema and in the metropolitan area of the capital city of the State of Paraíba, project activities will not interfere with Indigenous Peoples and Lands. In the State of Paraíba, the Indigenous Lands of the Potiguara and Potiguara de Monte-Mor are located in the coastal municipalities of Baía da Traição, Marcação and Rio Tinto – which lay outside of the project’s area of intervention. The screening of</td>
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indigenous populations and areas were made through the National Indigenous Foundation - FUNAI, under the Ministry of Justice (www.funai.org.br). FUNAI is responsible for the identification and delimitation, demarcation, land regularization and registration of land traditionally occupied by indigenous peoples in the country.

OP/BP 4.12 Involuntary Resettlement is triggered. Land acquisition – with potential adverse impacts related with involuntary resettlement – is envisaged in the works related with the implementation of the Transparaíba Water Supply System and the expansion of wastewater services in the city of João Pessoa.

Project designs of most of these works are still in early stages of preparation. Alternative locations are under consideration and executive projects would not be defined by Appraisal. Only one of these works – the first section of the Curimatau water main (which is being proposed as counterpart works) – has its executive project design in a most advanced stage and works have indeed started in a small sector of the water main.

Three safeguard instruments have been prepared by the Borrower before appraisal:
(i) A Resettlement Policy Framework was prepared to guide the implementation of all project activities that will be fully defined after appraisal;
(ii) An Abbreviated Resettlement Action Plan for the activities in the Curimatau water main that may be procured before project effectiveness; and,
(iii) an audit of the processes of land acquisition required as part of early activities carried out in the Curimatau water main.

Consultations with key stakeholders, beneficiaries and affected were carried out by the Borrower before Appraisal. The Resettlement Policy Framework was submitted to public consultation simultaneously with the ESMF.

Adverse impacts and compensatory measures established in the Abbreviated Resettlement Action Plan prepared for the first section of the Curimatau water main were negotiated with the affected people. These adverse impacts were few in number and just affected small and unoccupied tracts of land that represented less than 10 percent of the total
area of the 15 affected landholdings. These landholdings lay far apart one from the others and negotiations with landholders were taken on an individual and well-documented basis, after local meetings to communicate about project activities. During these first meetings, landowners requested payments to be made in cash and interventions in their cultivated land to be made after the harvesting. The feedback is incorporated in the ARAP. Agreements have been reached with all the affected people. Average final value paid is 70% higher than the minimum value and 142% higher than the value calculated by the experts. The Resettlement Policy Framework was broadly disseminated through the official website of the project and the Paraíba State Government. In addition, it was presented in the two face-to-face meetings held during the second-round of consultations (November 2018). Principles and guidelines of the Involuntary Resettlement policy, potential adverse impacts, measures of compensation for both physical and economic displacement, and different types of eligible groups among the people that may be potentially affected were presented and discussed. The RPF was broadly approved and supported. Participants of the two meetings emphasized the relevance of the issue and the adequacy of the proposed procedures and measures of compensation.

<table>
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<tr>
<th>Safety of Dams OP/BP 4.37</th>
<th>Yes</th>
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<td>The Independent Dam Safety Assessment Report submitted to the Bank confirmed that the three large dams related to the Project are being treated under the rehabilitation / upgrading works by the Departamento Nacional de Obras Contra as Secas (DNOCS), aiming to improve the dam's safety condition to match the requirements of the National Dam Safety Policy (Federal Law n. 12334 of 2010) and the Bank’s OP 4.37 provisions. The Report concluded that none of the dams related to the Project exhibited imminent dam safety risks, but presented a series of recommendations, including additional studies, technical investigations, and comprehensive risk assessment of the Epitácio Pessoa (Boqueirão) Dam, improvements of the existing O&amp;M plans and development of emergency...</td>
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<tr>
<td>Projects on International Waterways OP/BP 7.50</td>
<td>No</td>
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preparedness plans, improvements in the instrumentation and monitoring procedure, review of the hydrological studies of the entire basin in the upstream of the Boqueirão Dam, and capacity building/strengthening of Paraíba Water Agency (AESA) for regulation dam safety in the State. The activities described above would be funded by the Project. The Borrower agreed to engage an Independent Dam safety Panel to follow-up all activities related to the dams in particular for the comprehensive risk assessment of the Boqueirao Dam using the Potential Failure Mode Analysis.

Dam safety plans have not been prepared. Dam safety plans, including instrumentation plan, O&M Plan, and EPP for the associated existing dams will be prepared during project implementation. The framework plans for the O&M Plan and EPP have been prepared and reviewed. TORs and composition for the independent POE will be prepared during project implementation and will be reviewed and approved by the Bank. EPP has neither been prepared nor arrangements been made for public awareness and training. The framework EPP for the associated existing dams have been prepared and reviewed, based on which the EPP will be prepared with appropriate implementation mechanism in place during project implementation.

This policy is not triggered because the project will not affect any international waterways as defined under the policy. The Paraíba State is located in the Brazilian Northeast Region and is not bordered by other countries. The Piranhas-Açu, the Paraíba and the São Francisco River Basins are fully located within the Brazilian territory. These rivers are not tributaries of any transboundary rivers. The proposed project will neither affect the efficient utilization and protection of international waterways, nor adversely affect relations between the Bank and its borrowers, and between riparian states.
Projects in Disputed Areas OP/BP 7.60 | No | Not applicable, because the activities financed by the Project would not be located in disputed areas.

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:

The proposed Project includes activities that aim to regularize the supply of water by making available the needed infrastructure for supplying water, measuring consumption and collecting sewage and including construction of civil works - small physical interventions related to the complementation of sanitary sewerage systems (networks, trunk collectors, interceptors and pump stations) and replacement of existing networks. Despite the diversity of activities to be supported by the Project, and the scale of the Trans-Paraíba water system, the foreseen potential adverse environmental and social impacts are expected to be site specific. Most planned activities would be developed in altered areas and most impacts during the construction phase can be properly mitigated. Some activities under the proposed Project – such as the proposed interventions in João Pessoa – may have interference on natural mangroves habitats. Potential adverse environmental impacts on natural areas or environmentally important areas – including mangroves – would be site specific and in most cases mitigatory measures can be designed to minimize or mitigate impacts as well as to improve environmental performance of the existing wastewater system. In fact, these interventions may have net positive impacts on the local ecosystems, reducing raw wastewater spills and minimizing/mitigating the disposal of the wastewater treatment plant effluents on the Paraíba River estuary and mangroves.

The overall envisaged social impacts of project activities would be beneficial and pro-poor. The Transparaíba water supply system will benefit very poor municipalities in the driest regions of the state. Extreme poverty rate is high, reaching around 19% of the population (30% above the state average). The average per capita monthly income among the population of these beneficiary municipalities is low ranging from 49 to 85 percent of the Brazilian minimum wage. This population is facing the effects of seven years of drought and now will have access to reliable water supply. The expansion of the access to reliable water services, the availability of social tariffs, and the concomitant carrying out of education and communication programs among the beneficiary population (to induce knowledge, attitude, and behavioral changes and promote improved sanitation, health and hygiene practices as well as the rational use of water) are expected to have large positive impacts in both the health conditions and the family budgets of the low-income population.

These positive social impacts may also contribute to reduce gender gaps observed in participation at the labor market, job opportunities, time available for productive activities and income. Due to traditional and still prevailing cultural norms related with gender-based division of labor, the lack of access to reliable water sources in the households is a key factor that increases women’s workload, reducing their job opportunities and income and contributing for the extreme vulnerability of women single-parent families. The expansion of affordable access to water services is expected to contribute to reduce women’s domestic workloads and, consequently, can contribute to reduce gender gaps associated to the traditional gender-based patterns of labor division.
2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

As mentioned early, potential adverse environmental impacts on natural areas or environmentally important areas – including mangroves – would be site specific and in most cases mitigatory measures can be designed to minimize or mitigate impacts as well as to improve environmental performance of the existing wastewater system. Most of the Project’s envisaged impacts would be site specific and reversible. Mitigatory measures were envisaged and can be designed and implemented during the project life. In addition, this policy was triggered, aiming to assist the client to conduct the mangrove water quality restoration, (João Pessoa waste water treatment plant), in a sustainable manner, as supporting socially beneficial and economically viable activities associated to these activities.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

The PSH/PB involves a diverse set of technical assistance and physical intervention activities. The specific location of the loss control works in the metropolitan region of João Pessoa will be defined during the implementation of the project. The analysis and definition of technological alternatives for the improvement and expansion of the sewage system in the metropolitan region of João Pessoa will be defined during the implementation of the project. The analysis and definition of activities related to the Transparaíba Adductor System (the entire Cariri branch in the Borborema region and most of the Curimataú branch in the Agreste region) will be defined during project implementation.

Project design for the civil works for the construction of the Transparaíba Water Main as well as for the improvements in the sanitation system of the João Pessoa Metropolitan Region are considering alternatives that reduce the adverse impacts related with land acquisition leading to involuntary resettlement. The water conductors will be set on rights-of-way of already established state and federal highways and mostly buried. The sanitation interceptor and collection networks will follow the streets and the expansion of the city’s largest sewage treatment plant will use abandoned quarry pits. These measures will reduce adverse impacts related with involuntary resettlement.

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.

Although the proposed project locations are not yet fully defined, mitigation measures have been designed for the following direct potential environmental and social impacts: (i) diffuse and point pollution, (ii) flow modification and hydro-morphological alterations to improve water services provision; (iii) noise, dust, and wastes caused by construction activities; (iv) the use of local roads for improving water services provision may affecting local communities because of changes in traffic patterns and local infrastructure, increasing levels of noise and dust and other nuisances and, consequently, posing risks to their safety; (v) adverse impacts related with land acquisition leading to involuntary resettlement; and (vi) potential adverse impacts related with labor influx. These mitigation measures have been addressed and defined in the project’s Environmental and Social Management Framework and Resettlement Policy Framework that have been prepared by the Client, publicly disclosed and consulted. These safeguard instruments establish several mechanisms for beneficiaries and other stakeholders feedback. They also defined the processes and procedures for the operation of the Project’s GRM. The Project’s GRM relies on the structures already in place in the implementing agencies to avoid unnecessary duplication of structures. These include a costumer’s service in CAGEPA and the Ombudsman offices in CAGEPA and SEIRHAMACT, which are integrated with the General Ombudsman Office of the State of Paraíba. These offices and services can be accessed by several and broadly known channels – phone hot-line, websites, e-mail addresses and local offices. Additionally, the Project will open social working offices at the sites of the main civil works, which will be staffed with experienced social workers and also serve as a channel for receiving and redressing complaints. The project will periodically report on the operation of the GRM, considering indicators related with number of grievances, time of response and resolution. One of the project’s intermediate indicators is “beneficiaries of the Trans-Paraíba Water Supply System attend their needs”.
As the proposed Project will involve construction of civil works, the project’s Environmental and Social Management Framework and bidding documents include specific measures to address labor requirements and performance, assess and manage labor influx related risks, as well as monitor potential impacts from labor influx.

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

The key stakeholders include: state agencies and providers of water and sanitation services; state agencies of regulation of water, sanitation and environmental services; water users living in the 38 municipalities that will be attended by the Transparaíba water mains in the semiarid regions of Sertão and Borborema, which comprise a large number of poor and very poor people; and the population of the Metropolitan Region of João Pessoa. Consultations with key stakeholders, beneficiaries and affected people were carried-out by the Borrower during preparation. A first consultation meeting with key stakeholders – including representatives of the organized civil society, experts and scholars, and members of the two relevant watershed councils (Paraiba watershed and Piranhas-Açu watershed) – was carried-out in February 15, 2018. The consultation dealt with the scope of the project and the social and environmental assessment of its activities. A total of 57 people took part in this first consultation round, including state officials and representative members of the Committees of the Paraiba and Piranhas-Açu River Basin; the State Council of Cities, the State Council of Environmental Protection and the State Council of Water Resources; the State Forum to Combat Corruption, the State General Attorney’s Office and the General Court of Justice. Following a recommendation of this first meeting, two public face-to-face meetings were held during the second-round of consultations, after public disclosure of the draft Environmental and Social Management Framework (ESMF) and Resettlement Policy Framework (RPF) in the official project website (http://paraiba.pb.gov.br/projetos-de-sustentabilidade-hidrica/ - public disclosed since November 1st, 2018). The second-round of consultation was announced through local and statewide mass communication channels. Key stakeholders were officially invited by the project’s key executing agency (SEIRHMACT). The face-to-face meetings took place in the cities of João Pessoa and Sumé, at November 20th and 21st, 2018. In total 84 people attended these meetings. In both meetings, the scope of the project and its components as well as the ESMF and RPF were presented. The findings of the social and environmental impact analysis were discussed. The proposed measures to avoid, minimize and/or mitigate adverse impacts (including involuntary resettlement issues) were evaluated. Three main questions were raised: (i) on the area of intervention of the Transparaíba Water System, as some participants showed interest on expanding activities to other drought-prone regions of the state (Seridó Ocidental region); (ii) the use of the water available through the Transparaíba System for agricultural purposes; and (iii) the inclusion of environmental education activities within the scope of the social works to be carried out with the beneficiaries of the Transparaíba System. These questions have been answered. The client preparation team answered that: (i) the Seridó Ocidental region will benefit from other state projects that fall outside of the scope of the World Bank loan; (ii) the water available through the Transparaíba System is just for human consumption; and (iii) environmental education activities – focusing on the rational use of water – is envisaged under the social works that will be carried out by CAGEPA as part of the project. The safeguard documents of the Project can be found for consultation at the following website http://paraiba.pb.gov.br/projetos-de-sustentabilidade-hidrica/
### B. Disclosure Requirements

**Environmental Assessment/Audit/Management Plan/Other**

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<thead>
<tr>
<th>Date of receipt by the Bank</th>
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<tbody>
<tr>
<td>&quot;In country&quot; Disclosure</td>
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<tr>
<td>Brazil</td>
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<td>01-Nov-2018</td>
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Comments

http://paraiba.pb.gov.br/projeto-de-sustentabilidade-hidrica/  
Draft version disclosed for consultation.

**Resettlement Action Plan/Framework/Policy Process**

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Comments

http://paraiba.pb.gov.br/projeto-de-sustentabilidade-hidrica/  
Draft version disclosed for consultation.

**Pest Management Plan**

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<tr>
<th>Was the document disclosed prior to appraisal?</th>
<th>Date of receipt by the Bank</th>
<th>Date of submission for disclosure</th>
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"In country" Disclosure
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.

If in-country disclosure of any of the above documents is not expected, please explain why:
The safeguards documents are available at http://paraiba.pb.gov.br/projeto-de-sustentabilidade-hidrica/)

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?  
NA

**OP 4.09 - Pest Management**

Does the EA adequately address the pest management issues?  
Yes

Is a separate PMP required?  
NA

If yes, has the PMP been reviewed and approved by a safeguards specialist or PM? Are PMP requirements included in project design? If yes, does the project team include a Pest Management Specialist?

**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 4.36 - Forests**

Has the sector-wide analysis of policy and institutional issues and constraints been carried out?  
NA

Does the project design include satisfactory measures to overcome these constraints?  
NA

Does the project finance commercial harvesting, and if so, does it include provisions for certification system?  
No

**OP/BP 4.37 - Safety of Dams**

Have dam safety plans been prepared?  
No

Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?  
No

Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?  
No

**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

World Bank

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APPROVAL

| Task Team Leader(s): | Marcos T. Abicalil  
|                      | Paula Pedreira de Freitas de Oliveira |

Approved By

| Safeguards Advisor: | Noreen Beg | 11-Dec-2018 |
| Practice Manager/Manager: | Rita E. Cestti | 11-Dec-2018 |
| Country Director: | Martin Raiser | 11-Dec-2018 |

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