



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

Appraisal Stage | Date Prepared/Updated: 30-Apr-2018 | Report No: PIDISDSA24704



BASIC INFORMATION

A. Basic Project Data

Country Peru	Project ID P157043	Project Name Modernization of Water Supply and Sanitation Services	Parent Project ID (if any)
Region LATIN AMERICA AND CARIBBEAN	Estimated Appraisal Date 27-Mar-2018	Estimated Board Date 13-Jun-2018	Practice Area (Lead) Water
Financing Instrument Investment Project Financing	Borrower(s) Republic of Peru	Implementing Agency The Technical Organization for the Administration of WSS services (OTASS)	

Proposed Development Objective(s)

The proposed Development Objective is to improve access to water and sanitation services in selected areas and strengthen the Borrower’s capacity at the national, and at the participating Service Provider level, to provide efficient water and sanitation services.

Components

- Improving Governance of Water Supply and Sanitation Service Providers
- Improving and Expanding Water Supply and Sanitation Services
- General Project Administration

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	200.00
Total Financing	200.00
of which IBRD/IDA	100.00
Financing Gap	0.00

DETAILS

World Bank Group Financing



International Bank for Reconstruction and Development (IBRD)	100.00
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Non-World Bank Group Financing

Counterpart Funding	100.00
Borrower	100.00

Environmental Assessment Category

B - Partial Assessment

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

B. Introduction and Context

Country Context

Peru has a population of over 31 million people, of which 79 percent live in urban areas and 21 percent in rural areas. The population is expected to reach 39 million by 2040. Despite recent slowdowns in the global economy, it remains one of the strongest economies in Latin America. Peru posted a gross national income of nearly US\$6 billion in 2016 and an annual gross domestic product (GDP) growth rate of 4.2 percent (2017).¹ The country’s steady economic growth is predominantly due to the abundance of natural resources, high commodity prices for mining products in the global market, prudent macroeconomic policies, and strong investments.

The effects of this strong growth on employment and incomes have helped over 9 million Peruvians escape poverty between 2004 and 2015. The poverty incidence rate fell from 58 percent to 22 percent, and extreme poverty dropped from 16 percent to 4 percent during this period.² The country’s Gini index has also seen a steady decline from 0.49 to 0.44 during the same period. Despite this positive economic picture, inequality is rising. Rapid urbanization poses an additional challenge as the poor who migrate to cities generally settle in marginal peri-urban areas lacking access to basic social services, including water and sanitation. Access rates for the 21 percent of the population that makes up the urban poor are lower than the national average by nearly 20 percent for water and 42 for sewerage.³

¹ World Bank data: <http://data.worldbank.org/country/peru>. However, GDP growth slowed down in 2014 due to adverse external conditions, a decline in domestic confidence, and reduced investments, although its growth rate remained above the regional average (2.4 percent versus 0.8 percent, respectively).

² World Bank. 2017. *Peru - Systematic Country Diagnostic*. Washington, DC: World Bank Group. Report No. 112694. <https://hubs.worldbank.org/docs/ImageBank/Pages/DocProfile.aspx?nodeid=27287614>.

³ INEI (*Instituto Nacional de Estadística e Informática*). 2014. *Perfil de la Pobreza*. INEI, Peru. https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/Lib1306/cap06.pdf.



On the external front, the main challenges that could affect economic growth include the decline in commodity prices, which is closely related to the global economic slowdown, and a possible period of financial volatility associated with anticipated higher interest rates in the United States. Domestically, GDP estimates are vulnerable to the impact of El Niño on the real economy. The scope of public transfers is limited to buffering a slowdown or volatility in the economy, which implies that nearly a third of the population remains vulnerable to shocks and could fall back into poverty due to impacts on their labor incomes. In 2017, severe flooding and landslides due to the *El Niño* phenomenon devastated the Peruvian piedmont and resulted in the death of nearly 200 people, the displacement of an estimated 700,000 others, and roughly US\$3.12 billion in damages to critical infrastructure, translating into 1.6 percent of GDP.⁴ The Government of Peru (GoP) has established a dedicated agency under the Presidency of the Council of Ministers to focus reconstruction financing and efforts on rebuilding more resilient infrastructure including water supply and sanitation (WSS) systems that have been affected.

Water plays a critical role in the growth of the Peruvian economy. In addition to supporting human development through providing access to basic services as an essential contribution to increasing health and eradicating poverty, the performance of WSS services has been found to be closely correlated to stimulating business competitiveness and thus economic growth. Moreover, continuity and quality of WSS services have a direct impact on the operational capacity (increased sales) and production efficiency of commercial and small-and-medium-scale industrial sectors.

Sectoral and Institutional Context

Throughout the last decade, Peru has made steady progress in increasing WSS coverage, meeting the Millennium Development Goals targets in 2015. National coverage rates for WSS in 2015 were 87 percent for access to improved water sources and 76 to improved sanitation⁵—compared to 60 percent coverage for water supply and 49 for improved sanitation in 1993.⁶ Although the coverage rates have increased, they are still below the regional averages, where, in 2015, 95 percent of the population had access to improved water supply and 83 percent had access to improved sanitation.

The relatively high service coverage levels mask a complex reality that is characterized by severe issues in continuity of supply, quality of service, and infrastructure performance. Both the coverage and quality of services vary widely among socioeconomic levels and geographical (Coastal, Andean, and Amazon) regions. Coverage rates in the Coastal region are relatively higher at 91 percent for water supply and 89 percent for sanitation; compared to the Andean region, which posts 77 percent and 69 percent, respectively; and the Amazon region, which provides the lowest coverage rates at 59 percent and 55 percent, respectively. Urban and rural disparities indicate that access levels in rural areas lag significantly behind those in urban areas. In total, roughly

⁴ Agencia de Reconstrucción con Cambio. 2017. "Reconstrucción con Cambios - Respuesta, Rehabilitación y Reconstrucción." National Congress, Lima, Peru. April 24, 2017. Session of Congress. <http://www.pcm.gob.pe/wp-content/uploads/2017/04/Reconstrucci%C3%B3n-Con-Cambios.pdf>.

⁵ Joint Monitoring Program (JMP). It should be noted that the GoP has set much higher standards of service than those included under the wider definition of 'improved services' of the JMP. For sanitation, the GoP now defines coverage in terms of 'dignified sanitation', under which certain solutions, generally accepted in other developing country contexts, no longer qualify as coverage in Peru. Hence, according to the GoP data, the actual coverage rates for WSS were 88 percent and 68 percent in 2015.

⁶ INEI (Instituto Nacional de Estadística e Informática). 1993. *National Census Data*.



3.8 million people in Peru lack access to water supply and another 9.7 million have no access to sanitation—60 percent of which live in rural areas.⁷

Despite considerable investments, the quality, efficiency and reliability of WSS services in Peru are below what could be expected of a middle-income country. The high priority given by the GoP to WSS is reflected in the amount of resources allocated to WSS infrastructure development. Between 2010 and 2015, the GoP spent, on average, US\$1.45 billion per year on WSS investments aimed at improving overall access, quality, and efficiency of services,⁸ a five-fold increase in comparison to investments in the 1990s and 2000s. This level of investment represents 0.8 percent of GDP and 13 percent of the annual investment budget, which is high for the Latin America and the Caribbean standards.⁹ Results, however, are not commensurate with investment and spending levels (see **Error! Reference source not found.** in Annex 4).

Institutional setup. WSS policy-setting, enforcement, regulation, technical assistance (TA), and service provision functions are allocated among national and subnational institutions. At the national level, the Ministry of Housing, Construction, and Sanitation (*Ministerio de Vivienda, Construcción y Saneamiento, MVCS*), oversees policy making and national planning, including prioritization and allocation of public investments at the national level. The Technical Organization for the Administration of WSS Services (*Organismo Técnico de la Administración de los Servicios de Saneamiento, OTASS*), which is mapped to the MVCS, is the apex institution charged with promoting and executing the national government's policy on administration and management of public utilities (*Empresa Prestadora de Servicios de Saneamiento, EPSs*), through TA. The OTASS also has the legal mandate to temporarily intervene in nonperforming EPSs, known as the Temporary Intervention Regime (*Régimen de Apoyo Transitorio, RAT*), to support their transformation. The National Program for Urban [Water &] Sanitation (*Programa Nacional para Saneamiento Urbano, PNSU*) and the National Program for Rural [Water &] Sanitation (*Programa Nacional para Saneamiento Rural*) are the two executing branches of the MVCS specifically tasked to design and implement WSS infrastructure using the national budget (subsidies) and hand over the operation and maintenance (O&M) of such infrastructure to regional or local governments. The National Superintendence of Water and Sanitation Services (*Superintendencia Nacional de Servicios de Saneamiento, SUNASS*) is an independent entity responsible for the economic regulation of WSS services and resolution of customer service complaints to the regulator.

Both regional and local governments are responsible for ensuring that investments in WSS in their jurisdictions are provided efficiently and according to applicable institutional, economic, financial, and policy standards. WSS services in urban areas are primarily provided by public EPSs, which are incorporated as limited liability stock companies whose shares are owned by regional and local governments. EPSs currently serve over 85 percent of the urban population and roughly 62 percent of the national population. Other service providers include municipalities, through smaller utilities or municipal divisions (which serve 9 percent of the population), and WSS Community Boards (*Juntas Administradoras de Servicios de Saneamiento, JASS*) in rural areas, which serve 29 percent of the population.

⁷ NWSP 2017–2021. MVCS.

⁸ MVCS report based on data collected from the Plan Nacional de Saneamiento 2006–2016, *Sistema Integrado de Administración Financiera (SIAF)*, *Cuenta General de la República*, Fondo Nacional de Financiamiento de la Actividad Empresarial del Estado (FONAFE), *Servicio de Agua Potable y Alcantarillado de Lima (SEDAPAL)*, PROINVERSION.

⁹ For instance, the Development Bank of Latin America (*Corporación Andina de Fomento, CAF*) (2011) has estimated that investments needed to reach universal WSS coverage in Latin America and the Caribbean should be in the order of 0.31 percent of GDP (2010 values).



Sector Challenges (Refer to Annex 4 for More Details)

An unfinished decentralization process that has not delivered expected results in terms of access to sustainable services and overall establishment of efficient, autonomous utilities. The decentralization of WSS responsibilities was introduced by the GoP through a series of regulations beginning in the early 1990s with the transfer of service provision responsibilities to the regional governments,¹⁰ apart from the WSS utility for metropolitan Lima (SEDAPAL) that remained under the auspices of the national government. This was followed by regulations that outlined sector objectives and created 49 EPSs.¹¹ However, the devolvement of responsibilities to regional and local governments was not accompanied by adequate incentives and capacity building. This gave rise to weaknesses in the policy and institutional frameworks, overlapping planning, and inefficient financing mechanisms, including budgetary allocations at various levels of government and complex administrative norms that continue to hamper improvements in WSS service delivery.

Peru's WSS sector exhibits misaligned incentives that have led governments to prioritize high-visibility infrastructure projects rather than focusing on the quality and sustainability of services. Limited efforts have been made to strengthen policy and institutional frameworks and establish intergovernmental arrangements for municipal WSS services that would foster improved WSS sector performance. Low tariffs insufficient to cover utility O&M expenses have sent incorrect pricing signals to consumers, leading to inefficient water usage. This misalignment of incentives has also contributed to inadequate human resource capacities and a neglect of consumer preferences due to the lack of accountability and transparency mechanisms. Moreover, the focus on funding infrastructure without ensuring meaningful local ownership and accountable management of the systems has resulted in the 'build-neglect-rebuild' paradigm.

Lack of sustainability of service providers. Apart from SEDAPAL, which serves nearly a third of the country's population, few EPSs generate sufficient revenues to contribute to investment or debt financing. The MVCS reports that EPSs are 141 percent overindebted and unable to effectively manage their operations.¹² Technical capacity and human resources within these EPSs are a continuing challenge. Low remuneration has contributed to a perverse cycle of difficulty to attract qualified personnel to effectively plan, implement, and manage WSS service delivery.

Challenges in WSS service delivery are exacerbated by uncertainty in water security. Although the coastal Pacific watershed, which is characterized by its aridity, accounts for roughly 1.8 percent of the country's water resources, it is home to 70 percent of the population and produces 80 percent of national GDP. In contrast, the Atlantic watershed to the east of the Andes Mountains, accounts for 97.7 percent of water resources, 26 percent of the population, and 18 percent of GDP. Peru has historically responded to the uneven distribution of water resources by increasing supply to water-scarce coastal areas through costly infrastructure projects, including large dams and interbasin transfers, with limited attention to measures aiming at increasing the efficiency of water use; controlling the use of groundwater; preventing water pollution; and protecting the water needs of the environment and vulnerable groups. Water spatial variability is compounded by temporal variability resulting in chronic shortages in dry seasons. The Peruvian piedmont and coastline are also prone to floods and mudslides due to high precipitation in degraded upper basins. In general, the frequency and intensity of floods and droughts has increased in some basins due to the continuous deterioration of watersheds and climate change impacts, including glacial retreat and variability in precipitation patterns. Climate variability poses a continuous risk to WSS services, resulting in rationing and intermittent water services during episodes of drought that disrupt

¹⁰ *Ley de Organización y Funciones del Ministerio de Vivienda* No. 574 approved in April 1990.

¹¹ *Ley General de Servicios de Saneamiento* No. 26338 approved in July 1994.

¹² SUNASS. Benchmarking 2014. http://www.sunass.gob.pe/doc/Indicadores2017/indicadores_1t2017a.pdf.



services to households and local businesses. Floods present downside risks due to flows of heavily polluted water as well as damage to WSS infrastructure.

The Government's Response

Upon assuming office in July 2016, the new administration declared universal access to WSS among its top priorities. The GoP subsequently launched important legal and institutional reforms aimed at achieving this goal. These include a new legal framework,¹³ WSS Public Policy,¹⁴ and the 2017–2021 National Water and Sanitation Plan (NWSP). The four major pillars of this plan are: (i) targeting unserved and vulnerable populations; (ii) optimizing technical solutions; (iii) financial sustainability; and (iv) institutional sustainability. The design of the new legal and institutional framework captured relevant regional experiences and lessons of previous experiences in Peru in defining the overall regulatory framework, the decentralization structure, the aggregation of service providers (to gain economies of scale), and the role of the national government as an enabler of the reforms.

These reforms center on gradually transforming the current EPSs into public corporations, as the drivers to achieve universal access. The EPSs are expected to expand their coverage by first tackling urban areas not yet under their administration and, subsequently, rural areas under their geographical jurisdiction. These legal and legislative frameworks provide the strategic underpinnings for the proposed operation.

The new legal framework and sector policy envisage changes in the enabling environment to provide adequate incentives to the EPSs, including more transparent resource allocation processes, better targeting of subsidies, and clearer roles and responsibilities for municipal and regional governments. Economic regulation by SUNASS is now expected to gradually extend beyond the coverage of large EPSs to the rest of the population—expanding the scope of SUNASS to include all urban and rural areas. In addition, OTASS will have a clear role in the transformation of EPSs through the provision of TA and the legal mandate to intervene and reform EPSs that fail to meet service and legal requirements. Policy instruments have been strengthened to allow both OTASS and SUNASS to better orient and incentivize corporate governance and reduce interference. Yet, implementing the wide reforms envisaged under the new legal and policy framework would entail significant challenges. Therefore, the proposed operation includes important activities supporting the transformation of the EPSs as well as strengthening the institutional architecture.

C. Proposed Development Objective(s)

The proposed Development Objective is to improve access to water and sanitation services in selected areas and strengthen capacity at the national and participating service provider level to provide efficient services.

Key expected results include:

- People provided with access to improved water sources (number; female)
- People provided with access to improved sanitation services (number; female)

¹³ *Decreto Legislativo* No. 1280. (*Ley Marco de la Gestión y Prestación de los Servicios de Saneamiento*). December 2016.

¹⁴ *Decreto Supremo* No. 007. (*Ley Marco de la Gestión y Prestación de los Servicios de Saneamiento*). March 2017.



- Working ratio reduced in selected utilities¹⁵
- Nonrevenue water reduction achieved in selected utilities¹⁶
- Percentage of population served by provider regulated by SUNASS

D. Project Description

The Project consists of three components: (i) Improving Governance of Water Supply and Sanitation Service Providers; (ii) Improving and Expanding Water Supply and Sanitation Services in selected EPS; and (iii) General Project Administration. The selection of the participating utilities is based on criteria that prioritize the objectives set forth in the new sector policy, as well as their potential to contribute to pillars outlined in the NWSP 2017–2021. Refer to Annex 1 and the Project Operational Manual (POM) for details on selection criteria for participating EPSs and project interventions.

Component 1: Improving Governance of Water Supply and Sanitation Service Providers (US\$38.73 million, of which US\$23.24 million IBRD financing)

This component will contribute to improving the efficiency of the sector by financing activities that will support national-level sector entities, primarily the MVCS, OTASS, and SUNASS, as well as the efficiency of the six selected EPSs. The component comprises the following three subcomponents:

Subcomponent 1.1: Improving Institutions, Policy, and Regulation of Water Supply and Sanitation Services (US\$7.82 million)

This subcomponent will support the implementation of key policy instruments and regulations geared at: (i) developing a sector-wide management information system (MIS) to facilitate both coordination between sector entities and the regulation of all service providers (EPSs, municipal service providers, and rural water boards); (ii) strengthening the systems and capacity of the regulator, SUNASS, including reformulating regulatory and tariff setting instruments;¹⁷ (iii) developing guidelines or procedures for regulating small EPSs and rural areas and for improved targeting of subsidies to enhance the financial efficiency of the sector; (iv) developing a methodology and supporting the implementation of the aggregation of service providers, including defining the minimal scale and size of EPSs and a progressive approach to formally integrate municipal service providers into EPSs; (v) preparing multiannual investment plans—which are the GoP’s primary budgeting tools—for the regions of Arequipa, Ucayali, and Cusco and Lima Province that will serve as planning instruments to define WSS service gaps (across the region and various types of service providers) to adequately introduce economies of scale of infrastructure investments, embed resilience and prioritize the GoP’s targeting of grant funding; and (vi) developing instruments, such as standard contracts and revised procedures, for public-private partnerships (PPPs) in wastewater treatment (WWT).

¹⁵ Working Ratio understood as ability to recover operating costs from annual revenue. Calculated by taking the company’s total annual expenses -operating and administrative costs- (excluding depreciation and debt-related expenses) and dividing it by the annual gross income.

¹⁶ Net water lost as a share of net water produced.

¹⁷ PMOs are instruments used by SUNASS to review and approve tariffs. They consist of detailed plans prepared by each EPS, outlining the investment needs that can be covered by a potential tariff adjustment.



Subcomponent 1.2: Strengthening of OTASS and PNSU (US\$3.88 million)

This subcomponent will finance a Project Coordinator and two implementation support consultant (ISC) firms, to support OTASS and PNSU in Project implementation, provide technical and operational capacity building, and provide with backing or support. An ISC will support OTASS in: (i) restructuring management mechanisms of EPSs under RAT; (ii) developing a TA program for EPSs to promote performance-based subsidies to reduce the need for national government intervention in EPSs through a menu of interventions, including but not limited to, a pool of experts, strategic alliances/twinning with regional utilities, seed funding, and so on; (iii) developing a new organizational structure for OTASS; and (iv) preparing standards and procedures for the analysis, preparation, and evaluation of WSS investment projects. Another ISC will support PNSU in financial management and administration; preparation of technical files, bidding documents, and works supervision.

Subcomponent 1.3: Improving efficiency and sustainability of service providers (US\$27.02 million)

This subcomponent will support a series of management efficiency measures aimed at improving the performance of selected EPSs. Formal participation agreements will be signed between OTASS and each participating EPS, establishing the obligations of the national government and each of the selected EPSs. Further details on the selection criteria are provided in Annex 1.

For SEDAPAR, SEDACUSCO, EMAPACOP, and EMAPA Huacho, strategic planning documents or business plans have been developed through a World Bank Non-Lending Technical Assistance (NLTA)¹⁸ that provided a diagnostic of challenges and articulated a series of activities including investments that can support improvement of the EPSs' performance. Similar planning instruments will be developed for EMAPA Hualal and SEMAPA Barranca. This subcomponent will support, *enter alia*: (i) **institutional and planning improvements** that include: demand studies, hydrological assessments, preparation and/or updating of master plans (current and future demands, new business models (e.g. decentralized peri-urban service delivery), contingency planning (for droughts, floods and other natural disasters), sanitation master plans for some EPSs, human resources (capacity building for technical and managerial staff), communication; (ii) **operational improvements** such as: establishment of district management areas (sectorization), development and potential implementation of non-revenue programs (hydraulic studies of networks, needs assessment for macro and micro-metering, leak detection and control, etc.), automation of WSS infrastructure (Supervisory Control and Data Acquisition [SCADA]), and the development and implementation of communication and client orientation programs (redress, facilitation of household connections, etc.); and (iii) **commercial management improvements** that will include improvements including Improvements of commercial systems and enhancement of commercial cadastral as well as financial management systems and in general different activities aimed at improving the overall commercial and financial performance of the EPS. For EPSs with relatively strong performance such as SEDAPAR, this subcomponent will also support the development a pathway to access capital markets and commercial financing. Activities prioritized in these plans will be financed through a combination of resources from this Project, the GoP counterpart financing, and/or resources from the participating EPSs. Further details of actions and activities financed under this subcomponent are included in Annex 1.

Component 2: Improving and Expanding Water Supply and Sanitation Services (US\$151.52 million of which US\$75.76 million IBRD financing)

This component will finance the rehabilitation and expansion of WSS infrastructure of participating EPSs. Proposed activities and efforts to improve efficiency through reduction of physical water losses, increase energy efficiency and put in place tangible mitigation measures to reduce emissions (information on GHG targets can be

¹⁸ World Bank. *Peru: Support to the Water Sector Modernization Program (P150824)*. 2015–2017.



found in Annex 1). Similarly, expansion of wastewater treatment and household connections intends to increase access, reduce environmental pollution and potential health hazards and reduce carbon emission. Some infrastructure investments have been identified in the business plans, as well as in the Optimized Master Plans (*Planes Maestros Optimizados*, PMOs) approved by SUNASS under the tariff review process, or directly by the EPSs as part of their expansion efforts. Investments that will be considered for financing under this Project must meet the criteria set forth in Annex 1. Potential investments include, among others civil works, goods, and consultant services for: (i) the rehabilitation of existing water supply and sewerage networks and household connections; (ii) rehabilitation of existing water and sewerage treatment plants, water storage tanks, and pumping systems; (iii) development of new decentralized WSS treatment capacity; (iv) the expansion of water and sewerage household connections within areas lacking formal services; and (v) the installation of macro and micro meters.

The rehabilitation of infrastructure financed under this component will be closely linked with efficiency measures in Subcomponent 1.3 to optimize NRW reduction and reduce stress on finite water resources. In the case of Cusco, to address broader water security challenges, diversifying water sources to avoid overreliance on sources vulnerable to drought and overexploitation is also envisioned. Decisions about infrastructure to be rehabilitated or expanded under this Project will pay attention to vulnerabilities in water supply systems and build resilience to climate change. This component will finance feasibility, detailed engineering designs, and associated social and environmental management (safeguards) implementation. The remaining infrastructure subprojects will be identified (through preparation of the Government prefeasibility studies) during Project implementation.

At the prefeasibility stage, 10 subprojects (5 from SEDAPAR and 5 from SEDACUSCO) were vetted and have been provisionally included for financing under this Project. Of these subprojects, 2 have detailed engineering designs and encompass both expansion and improvements of existing WSS systems. These activities will be closely implemented with activities under subcomponent 1.3 to ensure communities can affordably connect to both water supply and sanitation services. Further details are found in Annex 1.

Component 3: General Project Administration (US\$9.75 million, of which US\$1 million IBRD financing)

This component will support the management and monitoring of activities associated with project implementation through OTASS and include TA and administrative support to the day-to-day implementation of procurement and financial management (FM) activities, the environmental and social safeguards monitoring, monitoring and evaluation (M&E), and final project evaluation. It will also finance training, communication, and incremental costs incurred to implement the Project.

E. Implementation

Institutional and Implementation Arrangements

Project implementation responsibilities. The recipient of the loan will be the Republic of Peru, through the Ministry of Economy and Finance (MEF), which will transfer the proceeds to OTASS and MVCS-PNSU, as co-implementing units of the Project. The Project Implementation Unit (PIU) under OTASS (OTASS-PIU 2) will implement activities under Components 1 and 3, and PNSU as an existing PIU will create a Coordinating Unit (CU) within PNSU to implement activities under Component 2. OTASS-PIU 2 will have an additional role of overall project coordination and will be responsible for internal and external communications, FM, procurement, and compliance with safeguards policies. OTASS-PIU 2 will interact directly with PNSU-PIU and coordinate with OTASS's directorates, the CUs within PNSU, the Vice Minister of Construction and Sanitation (VMCS), SUNASS,



the EPSs, and with the World Bank. PNSU has extensive experience in implementing WSS water infrastructure and in implementing activities financed by various development partners. OTASS is a relatively new entity¹⁹ and requires support. To strengthen technical capacity within both PIUs, staff will be contracted by the Project. Overall coordination has been delegated to OTASS despite its relatively nascent status due, primarily, to OTASS's legal standing, which provides more financial autonomy, which will facilitate fiduciary implementation and oversight during implementation.

An institutional capacity assessment will be carried out for the participating EPSs. EPSs with adequate capacity, such as SEDAPAR and SEDACUSCO, may be given greater responsibilities in the procurement process of activities to be managed directly with each EPS. These EPSs, may play a greater role in the execution of works and contract independent supervisors for each subproject in their jurisdiction. For EPSs under RAT that are currently intervened by OTASS or have limited capacity, OTASS and PNSU will prepare and manage infrastructure contracts. OTASS and PNSU will provide hands-on fiduciary support to strengthen the capacity of these EPSs.

Participation and coordination mechanisms. The Project requires the engagement of multiple stakeholders at the national, regional, and local levels. OTASS will sign cooperation or participation agreements to define roles and responsibilities in the implementation of the Project between the participating entities: OTASS-PNSU; OTASS-PNSU-EPSs (with each EPS); OTASS-SUNASS; and OTASS-VMCS. A multisectoral project coordinating committee (PCC) will provide high-level guidance, oversight, and control to the Project. It will be chaired by the Executive Director of OTASS and composed of: (i) the VMCS, (ii) the Executive Director of PNSU, (iii) the General Manager of SUNASS, and (iv) the coordinator of the Project. There will be three levels of coordination: strategic meetings through the PCC meetings (annual); executive meetings of OTASS and PNSU (quarterly); and operative meetings with OTASS, PIUs, and other entities (when needed). Representatives from MEF and EPSs will meet at interinstitutional PCC meetings annually.

Project implementation will require close coordination with regional and municipal governments that are owners of the participating EPSs as well as other government entities responsible for water and environment. Project preparation has benefited from substantial engagement with regional and municipal governments to prioritize investments and service provision improvement activities. Moreover, the relevant subnational government entities are expected to participate in the preparation of the multiannual investment plans carried out by the MVCS. As shareholders of the targeted EPSs, they will also review and approve master plans developed by each service provider. Engagement and coordination between the National Water Authority (*Autoridad Nacional de Agua*, ANA), responsible for managing water resources at a national level, for providing water rights (surface water and groundwater) and discharge permits, as well as the Ministry of Environment, responsible for setting the quality standards of effluents that are discharged from WWT plants, and the selected EPSs is also necessary. The MVCS, through OTASS, will facilitate engagement with these entities when needed.

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

Under the scope of component 1 and 2, the Project will carry out interventions in Arequipa, Barranca, Cusco, Huaral, Huacho, and Pucallpa at the level of the EPS, namely, SEDAPAR in Arequipa, SEMAPA in Barranca, SEDACUSCO in Cusco, EMAPA Huacho, EMAPA Huaral, EMAPACOP in Pucallpa, and municipalities. EMAPACOP in Pucallpa was selected because it has the lowest coverage rate (estimated at 52 percent, with a high number of inactive connections) in a region with high rates of poverty and the need for increased

¹⁹ OTASS was created in 2013 by law N°30045 and became operational in 2015.



social inclusion. The cluster of EMAPA Huacho, EMAPA Huaral and SEMAPA Barranca in the Lima Region was selected because the high degree of fragmentation impeding the achievement of economies of scale. SEDAPAR in Arequipa was selected because it lacks of regional autonomy to plan, implement, and manage WSS services across its service area, covering the entire Arequipa region. SEDACUSCO in Cusco was selected because of the need to balance the pressures of expansion with management for environment protection and to address water security issues (water quantity and quality) The sub-projects to be considered for inclusion in the program and financing are in the process of selection. Two sub-projects have been identified in Arequipa (SEDAPAR). They are located in Caraveli and Chuquibamba districts.

G. Environmental and Social Safeguards Specialists on the Team

Raul Tolmos, Environmental Safeguards Specialist
Carlos Tomas Perez-Brito, Social Safeguards Specialist

SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>This project is classified as environmental category B as per OP/BP 4.01 on environmental assessment, as the investments involve relatively standard works with no likely significant or long-term environmental or social impacts and that can be readily prevented or mitigated with standard measures. The potential negative environmental and social impacts associated with the construction works could include erosion or sedimentation due to earth works, operation of work campsites, noise and dust from equipment and earthworks, spills of oil based products, worker health and safety, storm water runoff into water courses, and traffic risks and nuisances.</p> <p>Since the specific location of many investments and associated works is not known, an Environmental and Social Management Framework (ESMF) was developed. The ESMF was developed in accordance with the World Bank Group Environmental, Health and Safety Guidelines on Water and Sanitation and national legislation. Also, during project preparation,</p>



as selected investment projects were identified and their location known, the corresponding environmental, health, safety and archeological management instruments (e.g. Environmental Impact Statements-DIAs and their constituent EHS management plans, archeological studies, etc.) were developed by Client as part of the pre-investment process for particular investment as in the case of Chuquibamba and Caraveli in Arequipa. The ESMF and the specific EHS plans and related studies (e.g. archeology, vulnerability and seismic hazards, geology, etc.), as well as their associated preliminary or final environmental licenses will be disclosed before appraisal.

Performance Standards for Private Sector Activities OP/BP 4.03	No	This policy is not triggered. The World Bank safeguard policies will be applicable to the Project.
Natural Habitats OP/BP 4.04	Yes	This policy is triggered since some investments on water and sanitation will be undertaken in small rural towns where water bodies and catchment areas harbor natural habitats that might be affected by the Project. Appropriate screening criteria were developed as part of the ESMF to ensure that impacts on natural and critical natural habitats are properly evaluated. ESMF articulates that no sub-projects, which involve the significant conversion of natural habitats will be financed by the Project.
Forests OP/BP 4.36	Yes	This policy is triggered because some multiannual investment plans to be prepared by EPSs located in the Peruvian Amazon region, specifically EMAPACOP in Ucayali, might include activities with potential adverse impacts and risks on forest ecosystems (e.g. tropical forest). Appropriate screening criteria were developed as part of the ESMF to ensure impacts on forests are avoided and/or minimized.
Pest Management OP 4.09	No	This policy is not triggered since the proposed project does not anticipate to finance and/or use pesticides. Minor use of pesticides to control pests in construction areas or in workers' campsites has been addressed in the ESMF.



Physical Cultural Resources OP/BP 4.11	Yes	<p>This policy is triggered given the national scope of this project and Peru's widely spread of physical cultural resources. Procedures on how to deal with physical cultural resources including their surveying during sub-project preparation are included in the ESMF. The ESMF has also included chance-find procedure.</p>
Indigenous Peoples OP/BP 4.10	Yes	<p>The policy is triggered, given the project's national scope and the presence of indigenous peoples across the country, totaling around 7 million people and comprising 24 percent of the population.</p> <p>Since this is a project with multiple sub-projects around the country, an Indigenous Peoples Planning Framework (IPPF) has been prepared by the client, and has been disclosed. The IPPF will be used to guide implementation of activities to ensure adequate representation and participation of indigenous communities in project activities, and to ensure that specific issues and needs of indigenous people are adequately identified, assessed and taken into consideration.</p> <p>By the time of Project's appraisal, two subprojects are in an advanced state of design, specifically Chuquibamba and Caravelí water treatments plants located in remote areas in the Arequipa region. After conducting site visits and reviewing consultation process conducted by the client, these plants are not expected to have any potential negative impact on IP population in the area, on the country it will benefit an important number of communities in the area.</p>
Involuntary Resettlement OP/BP 4.12	Yes	<p>Due to the nature of this project with multiple sub-projects around the country that will potentially require acquisition of small plots of land and management of right way for water transmission pipelines, the client has prepared a Resettlement Policy Framework (RPF), which has been disclosed.</p> <p>Regarding the two sub-projects with an advanced stage of design and after conducting site visits and reviewing projects technical documents, it was concluded as follows. Sub-project in Chuquibamba, no resettlement impacts are expected, as the work</p>



will be done on municipal land and the water and drain system will run along already existing roads and no access closings are needed. For the sub-project in Caravelí, three private properties will be used for the installation of a new pipeline, therefore an Abbreviated Resettlement Plan (ARP) has been prepared by the client, consulted with three land owners and will be disclosed prior to appraisal. The rest of the pipeline will run along already existing roads and no road or access closings are needed.

In both cases, special attention will be given to the preparation and proper adherence of the Code of Conduct by the contractors, as well as the Grievance Redness Mechanisms (GRM), since both sites are in remote areas.

Safety of Dams OP/BP 4.37	No	This policy is not triggered. The Project will not support the construction or rehabilitation of dams. The potential for sub-projects or project investments to rely on the services of existing dams will be assessed during project preparation.
Projects on International Waterways OP/BP 7.50	Yes	This policy was triggered as water supply and sewerage infrastructure works are planned within the Vilcanota basin, which is a tributary upstream of the Amazon River Basin, shared between Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela. Given that Project activities will not adversely change the quantity or quality of water flows to these riparians, they are exempted from the riparians notification requirement.
Projects in Disputed Areas OP/BP 7.60	No	This policy is not triggered since the Project will not be implemented in areas under dispute.

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:

Potential large scale, significant and/or irreversible environmental impacts are not foreseen for this project.

Environmental impacts are the typical ones for this kind of project (e.g. dust, noise, odors, construction waste, hazardous waste, etc.).

The overall project impact is expected to be positive due to the improve access to water and sanitation services in



selected areas and no large scale or significant impacts are expected. Land acquisition for sub-projects will be needed but are minimum and the client has prepared safeguards instruments to manage those impacts, including the Environmental and Social Management Framework, the Resettlement Management Framework and the Indigenous Peoples Planning Framework.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

The replacement of old water pipelines made of asbestos-cement by new PVC water pipelines might generate hazardous waste composed of old asbestos-cement. In some locations (Arequipa), the new PVC water pipelines will be located in a position parallel to the old asbestos cement water pipelines, so those old pipelines will be left underground in their current location. In case, old asbestos-cement water pipelines were removed during works, certified specialized firms will be responsible for collection and final disposal of this hazardous waste.

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

Component 2 of this component will finance the rehabilitation and expansion of WSS infrastructure of participating EPSs (according to each EPS's business plan). Therefore, most rehabilitation and expansion of infrastructure will involve existing facilities. As explained before, in the case of EPSs located in Arequipa, it has been decided to leave the old asbestos-cement water pipelines leaving underground (buried).

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 an Indigenous Peoples Planning Framework (IPPF) and a Resettlement Policy Framework (RPF) as part of a broader Environmental and Social Management Framework (ESMF), as well as the corresponding Social and Environment management instruments to respond to the social and environmental safeguards triggered by the Project, including the Abbreviated Resettlement Plan (ARP) for the Caraveli district in Arequipa.

OTASS will be responsible for overall implementation of safeguards activities in direct coordination with several Empresas Prestadoras de Servicios (EPSs), such as the cases of the two sub-projects in Arequipa, Caraveli and Chuquibamba that will be coordinated with SEDAPAR. Institutional capacity will need to be strengthened. In Peru, there is robust environmental and social legislation, but OTASS is a relatively new entity and will need constant supervision and safeguards support to strengthen its capacity so it can ensure compliance with safeguards instruments. OTASS will hire at minimum a social specialist and an environmental specialist to provide support to the day-to-day project implementation.

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

The Project seeks to engage citizens through the citizen engagement units of the EPSs. Engagement with these units will entail: improvement to grievance redress and feedback channels, strengthening of complaint handling through surveys, citizen report cards, mobile phone hotline, information and communication technology enabled ticketing systems so that complaints are transparently managed; and review of SUNASS's efforts to strengthen citizen redress systems to enhance its guidelines to service providers to ensure wider stakeholder participation and promote greater accountability. The Project Operation Manual will lay out all citizen engagement mechanisms during the sub-project cycle. The Project will also conduct outreach to the indigenous populations.



B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other

Date of receipt by the Bank 13-Feb-2018	Date of submission for disclosure 02-Mar-2018	For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors
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"In country" Disclosure

Peru
20-Feb-2018
Comments

Resettlement Action Plan/Framework/Policy Process

Date of receipt by the Bank 13-Feb-2018	Date of submission for disclosure 02-Mar-2018
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"In country" Disclosure

Peru
26-Feb-2018
Comments

Indigenous Peoples Development Plan/Framework

Date of receipt by the Bank 13-Feb-2018	Date of submission for disclosure 02-Mar-2018
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"In country" Disclosure

Peru
26-Feb-2018
Comments

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/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 4.10 - Indigenous Peoples

Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?

Yes

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

Yes

If the whole project is designed to benefit IP, has the design been reviewed and approved by the Regional Social Development Unit or Practice Manager?

NA

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?

No

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 7.50 - Projects on International Waterways

Have the other riparians been notified of the project?

No

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?

Yes

Has the RVP approved such an exception?

Yes

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



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APPROVAL

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Approved By

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