



Integrated Water Resources Management in Ten Basins (P151851)

LATIN AMERICA AND CARIBBEAN | Peru | Water Global Practice |
IBRD/IDA | Investment Project Financing | FY 2017 | Seq No: 9 | ARCHIVED on 21-Oct-2021 | ISR48645 |

Implementing Agencies: National Water Authority of the Ministry of Agriculture - Autoridad Nacional del Agua (ANA), REPUBLIC OF PERU

Key Dates

Key Project Dates

Bank Approval Date: 28-Apr-2017

Effectiveness Date: 12-Mar-2018

Planned Mid Term Review Date: 30-Sep-2020

Actual Mid-Term Review Date: 26-Jan-2021

Original Closing Date: 30-Dec-2022

Revised Closing Date: 30-Dec-2022

Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The proposed Project Development Objective (PDO) is to strengthen the capacity of targeted water resources management related institutions to plan, monitor and manage water resources at the national level and in selected river basins in Peru.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

Components Table

Name

Component 1: Consolidating IWRM at the National Level:(Cost \$65.16 M)

Component 2: Improving WRM in Selected Pilot River Basins:(Cost \$14.80 M)

Component 3: General Project Administration:(Cost \$8.19 M)

Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Risk Rating	<input type="checkbox"/> Substantial	<input type="checkbox"/> Substantial

Implementation Status and Key Decisions

This ISR covers the period from March to September 2021 and reflects the findings of one implementation support mission and several project progress meetings over that period of time. Following progress in the implementation of project activities over the first years of implementation, the Project is on a good path to achieving its Project Development Objective. Several contracts to execute investments under the Project continue to progress, including the installation of a data center for the National Water Resources Information System, the installation of dam monitoring instrumentation, the perforation of groundwater monitoring wells and the preparation of basin management plans for the participating river basins in the Atlantic watershed. Newly signed contracts to carry out investments of installation of hydrometeorological stations and automatic irrigation canal measuring gauges have experienced partial delays due to delays in international shipping caused by issues in the global supply chain. These delays together with continuous impact of measures taken by the Government to contain the spread of COVID-19 starting since early 2020 are continuing at varying levels of severity and the Bank is monitoring a potential impact on the project implementation timeline in order to proactively seek solutions to ensure a successful achievement of the Project Development Objective by the current Project closing date December 2022.



mpa Table

Multiphase Programmatic Approach (MPA) Status

Risks

Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	☐ Moderate	☐ Substantial	☐ Substantial
Macroeconomic	☐ Low	☐ Moderate	☐ Moderate
Sector Strategies and Policies	☐ Moderate	☐ Substantial	☐ Substantial
Technical Design of Project or Program	☐ Moderate	☐ Moderate	☐ Moderate
Institutional Capacity for Implementation and Sustainability	☐ Substantial	☐ Substantial	☐ Substantial
Fiduciary	☐ Moderate	☐ Moderate	☐ Moderate
Environment and Social	☐ Substantial	☐ Moderate	☐ Moderate
Stakeholders	☐ Substantial	☐ Substantial	☐ Substantial
Other	--	☐ Moderate	☐ Moderate
Overall	☐ Substantial	☐ Substantial	☐ Substantial

Results

PDO Indicators by Objectives / Outcomes

Strengthen capacity of targeted WRM related institutions to plan, monitor and manage water resources				
▶ National Water Resources Information System providing validated online data and information products to decision makers, water resources professionals and general public (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	NWRIS databases established.	NWRIS databases established.	NWRIS databases established.	NWRIS fully integrated with monitoring systems, DSS tools and providing data and information products.
Date	14-Mar-2017	16-Mar-2021	08-Oct-2021	30-Dec-2022
Comments:	Development of the NWRIS is underway, including the procurement and installation of ICT equipment, the design of the decision support tool, and the development of data collection and data mainstreaming. The data management system housing hydrological and water resources information is enabled, which are also available in public format.			



► Dam safety unit established and operational (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No unit.	Unit dissolved and proposed for re-establishment.	Unit established.	Dam safety program in place with unit operational, legal framework established, guidelines and tools developed. Implementation of monitoring systems in place for selected dams
Date	14-Mar-2017	16-Mar-2021	08-Oct-2021	30-Dec-2022
Comments:	A new Dam Safety and O&M Unit was established by GM Resolution No. 28-2021 of June 18, 2021. It is currently in the process of being staffed, define functions and preparing a capacity building plan.			
► Basin councils /committees with approved IWRM plans and under implementation (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	6.00	6.00	6.00	10.00
Date	14-Mar-2017	16-Mar-2021	08-Oct-2021	30-Dec-2022
Comments:	Consisting of 9 basin water resources councils and one sub-basin committee. The 6 committees on the Pacific have been established already prior to this project and will update their basin plan as part of this project; 4 committees on the Atlantic side have been recently established under the project. The development of plans for the Atlantic basins is advancing as planned.			
► Groundwater committees established for targeted aquifers with participatory management plans approved under implementation. (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No committees in place.	No committees in place.	No committees in place.	Participatory groundwater management committees operational with management plans under implementation
Date	14-Mar-2017	16-Mar-2021	08-Oct-2021	30-Dec-2022
Comments:	Installation of piezometers, measuring and control and data transmission instruments is progressing. Creation of 4 groundwater committees planned to start 2021, as are the 2 management plans. Discussions going on about dropping of management plan for Tacna due to social conflicts.			

Intermediate Results Indicators by Components

Component 2: Improving WRM in Selected Pilot River Basins				
► Number of basins in the Pacific Watershed with IWRM plans updated with financing and under implementation (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target



Value	6 (with average 30% of plans implemented)	6 (with average 30% of plans implemented)	6 (with average 60% of plans implemented)	6 plans with financing secured and under implementation
Date	14-Mar-2017	16-Mar-2021	08-Oct-2021	30-Dec-2022
Comments:	Contract awarded for development of 4 plans in the Atlantic watershed. Stakeholder consultations ongoing, despite initial delays due to restrictions in gathering due to the pandemic			
► Cultura del Agua program tailored to Atlantic Watershed context to build capacity and improve knowledge and practices of the general public in IWRM at the river basin level (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Cultura de Agua program rolled out in 6 basins in Pacific Watershed	Cultura del Agua program rolled out in 6 basins in Pacific Watershed.	Cultura del Agua program rolled out in 6 basins in Pacific Watershed.	Cultura de Agua program rolled out in primary schools, targeted user groups and general public through various campaigns and capacity building activities
Date	14-Mar-2017	16-Mar-2021	08-Oct-2021	30-Dec-2022
Comments:	Outline for Cultura de Agua program developed for the Atlantic Watersheds. Specifically, 61 persons have been trained and education guidelines have been developed in collaboration with the Ministry of Education for campaigns in schools.			
► Integrated forecasting and early warning plans implemented in targeted basins and provide real-time information to general public (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	2 integrated forecasting and early warning plans implemented in targeted basins and providing information to general public
Date	14-Mar-2017	16-Mar-2021	08-Oct-2021	30-Dec-2022
Comments:	Not yet initiated, depends on data collection and analysis, which is ongoing.			
Component 1: Consolidating IWRM at the National Level				
► Monitoring systems with O&M arrangements in place (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No monitoring system in place.	No monitoring system in place.	Monitoring systems partially installed.	2,825.00
Date	14-Mar-2017	16-Mar-2021	08-Oct-2021	30-Dec-2022
Comments:	Installation of several monitoring systems is underway for hydromet stations, irrigation measuring gauges, dam safety instrumentation, groundwater measuring stations, water quality measurement, etc. Some of the systems are close to completion (e.g. some of the dam safety instrumentation or groundwater measuring stations). A O&M Unit was created within ANA to oversee the operation and maintenance of the systems.			
► Percentage increase on the number of annual hits for NWRIS web portal (Text, Custom)				



	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	820.00	820.00	40% increase in hits to NWRIS web site and web portal demonstrating increased use of databases and, analysis information products
Date	14-Mar-2017	16-Mar-2021	08-Oct-2021	30-Dec-2022
Comments:	At a last measurement in December 2020, the number of hits on the web portal has reached 118,091, compared to the value of 12,837 at baseline month December 2017. This constitutes an increase of 820 %.			
► Number of dams with dam safety assessments completed and monitoring instruments installed (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	1.00	1.00	8.00
Date	14-Mar-2017	16-Mar-2021	08-Oct-2021	30-Dec-2022
Comments:	Installation of monitoring instruments at 92% of progress. Dam safety assessment completed for Poechos dam. Other assessments planned for 2022.			
► Monitoring and inspection of water use rights formalized for irrigation units (bloques) by ALA and water users associations (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No right formalized for irrigation units.	No right formalized for irrigation units.	No right formalized for irrigation units.	An increase in the number of formalized water rights in 800 irrigation units based on installation and monitoring of surface water abstraction for irrigation use
Date	14-Mar-2017	16-Mar-2021	08-Oct-2021	30-Dec-2022
Comments:	Sensibilization and capacity building about communal hydraulic systems are progressing at 77% with 1247 local leaders participating in the sensibilization exercises.			
► Number of water quality points monitored on a periodic basis (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No water quality point monitored.	No water quality point monitored.	No water quality point monitored.	33 permanent monitoring stations providing real-time data and 30 mobile monitoring campaigns carried out on an annual or bi-annual basis
Date	14-Mar-2017	16-Mar-2021	08-Oct-2021	30-Dec-2022



Comments:	Plan in place for periodic monitoring in selected basins, coordinated with AAAs and ALAs. Contracts to install automated water quality equipment in selected points has been awarded and purchase is in progress.			
► An increase in collection fees (retribución económica) for use of surface, groundwater and discharge of wastewater (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No increase in collection fees.	36% increase by 2019	36% increase by 2019	20% increase in collection of water use and discharge fees.
Date	14-Mar-2017	16-Mar-2021	08-Oct-2021	30-Dec-2022
Comments:	Overall, collection fees have increased by approx. 36% in 2019 (PNS 280 million) compared to the baseline of PNS 206 million in 2018. Figures for 2020 are not yet available. It is expected that overall collection fees for water use significantly declined in 2020 due to the impact of the COVID pandemic and recovery efforts on the broader fiscal situation.			
► Number of water resources related conflicts adequately addressed by ANA (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	40 (registered by Defensoría del Pueblo)	40 (registered by Defensoría del Pueblo)	40 (registered by Defensoría del Pueblo)	20 conflicts satisfactorily addressed with analysis and expert knowledge
Date	14-Mar-2017	16-Mar-2021	08-Oct-2021	30-Dec-2022
Comments:	Not yet progressed.			

Performance-Based Conditions

Data on Financial Performance

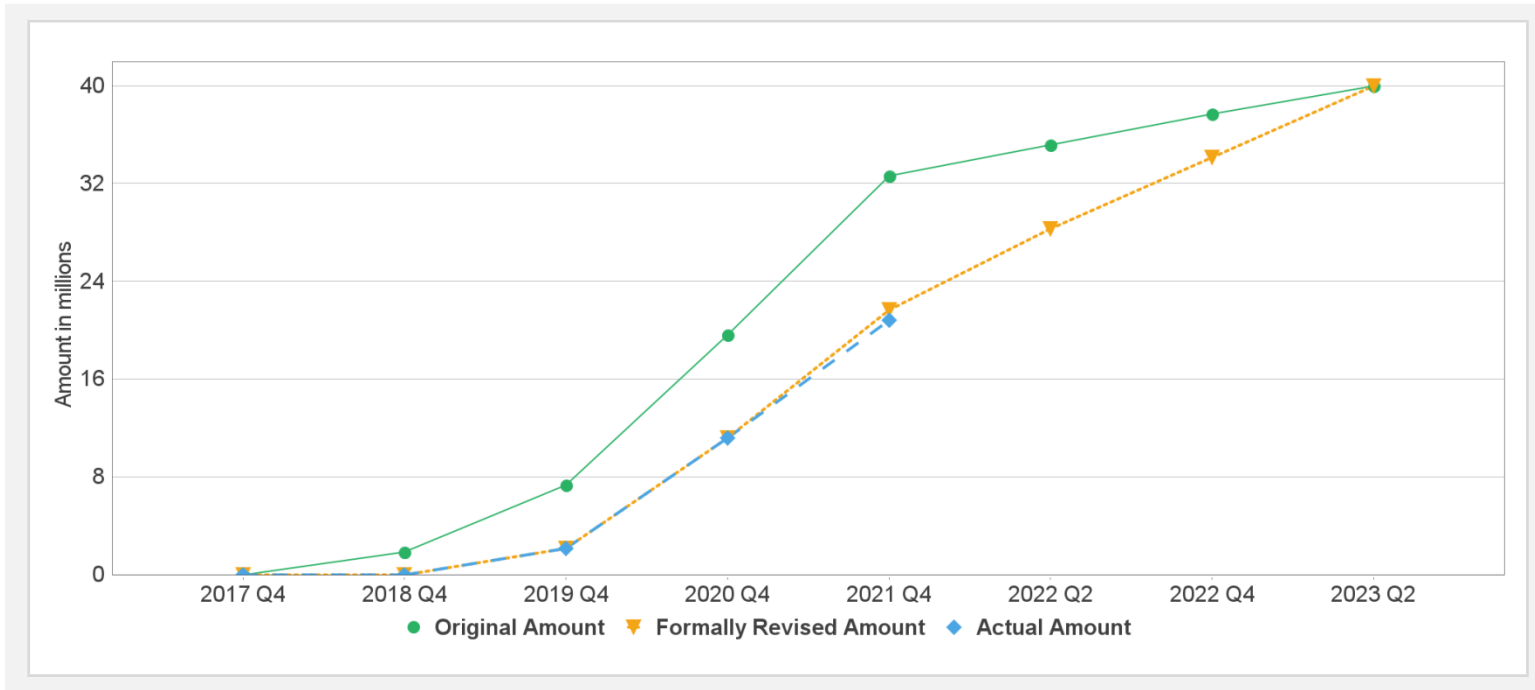
Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P151851	IBRD-87400	Effective	USD	40.00	40.00	0.00	22.81	17.19	57%

Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P151851	IBRD-87400	Effective	28-Apr-2017	25-Sep-2017	12-Mar-2018	30-Dec-2022	30-Dec-2022

Cumulative Disbursements



Restructuring History

There has been no restructuring to date.

Related Project(s)

There are no related projects.