



## 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: 7 | ARCHIVED on 23-Aug-2020 | ISR41257 |

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:

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"/> Moderately 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 November 2019 to August 2020 and reflects the findings of implementation progress, site visits during the mission of February 2020, and several video-conferences and meetings for project monitoring. The Board approved the Loan for the Integrated Water Resources Management in Ten Basins Project on April 28, 2017. The Loan Agreement was signed on September 25, 2017 and became effective on March 12, 2018. Project activities have begun following effectiveness, and ANA is advancing with investments to be undertaken in the thematic areas included in the Project. Progress has been made with the procurement processes of several packages, the execution of two contracts has been completed, and of several others are underway, including the installation of monitoring instrumentation for dams, basin plan design, groundwater well perforations, and data center installation for the National Water Resources Information Center SNIRH. The shelter-in-place measures taken by the Government to contain the COVID-19 pandemic starting in March 2020 have led to a reduction in economic activity across the country. They are expected to have a significant impact on project implementation progress over the coming months. The Bank team and ANA



are working closely to support ANA in the continuation of activities as much as possible under these circumstances and keep monitoring and maintaining safeguard requirements that apply to this Project as possible.

**Risks**

**Systematic Operations Risk-rating Tool**

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	☐ Moderate	☐ Substantial	☐ Substantial
Macroeconomic	☐ Low	☐ Low	☐ 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	☐ High
Fiduciary	☐ Moderate	☐ Substantial	☐ Substantial
Environment and Social	☐ Substantial	☐ Substantial	☐ Substantial
Stakeholders	☐ Substantial	☐ Substantial	☐ Substantial
Other	--	--	☐ 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	04-Dec-2019	13-Aug-2020	30-Dec-2022
Comments:	Development of the NWRIS is underway, including the procurement and installment of ICT equipment, the design of the decision support tool, and the development of data collection and data mainstreaming. Progress has enabled the operationalization of the data management system, currently housing hydrological and water resources information (near 300 million data entries), 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.	Dam Safety Unit established.	Dam Safety 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	04-Dec-2019	13-Aug-2020	30-Dec-2022
Comments:	Dam Safety Unit has been established by Resolution of the Head on ANA (N° 043-2018-ANA, February 5th, 2018) to be attached to the Directorate of Planning and Development of Water Resources in ANA. Three staff have been appointed to date. ANA has completed the definition of the unit's functions and full operation is underway.			
► 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	04-Dec-2019	13-Aug-2020	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. Firms have been contracted and the development of IWRM for the Atlantic basins is underway.			
► 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	04-Dec-2019	13-Aug-2020	30-Dec-2022
Comments:	As part of the management plans, the project is investing in installing piezometers, the perforations for which is currently underway. Altogether, there will be 2 groundwater committees, one for the Ica aquifers and one for Tacna.			

### Intermediate Results Indicators by Components

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.	No monitoring system in place.	2,825.00
Date	14-Mar-2017	04-Dec-2019	13-Aug-2020	30-Dec-2022
Comments:	Design and procurement for several monitoring stations is underway, including hydromet stations, irrigation measuring gauges, dam safety instrumentation, groundwater measuring stations, water quality measurement, etc. Partly contracts have been signed (dam safety instrumentation), partly procurement is in an advanced stage, partly designs are finalized or adjusted to fit the needs on the ground. Efforts to formalize O&M functions is underway.			
► Percentage increase on the number of annual hits for NWRIS web portal (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	40% increase in hits to NWRIS web site and web portal demonstrating increased use of databases and analysis information products
Date	14-Mar-2017	04-Dec-2019	13-Aug-2020	30-Dec-2022
Comments:	Not yet due, is measured annually.			
► 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	04-Dec-2019	13-Aug-2020	30-Dec-2022
Comments:	Installation of monitoring instruments underway, having completed for the Poechos Dam. San Lorenzo, Tinajones, and Gallito Ciego instrumentalization are underway.			
► 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	04-Dec-2019	13-Aug-2020	30-Dec-2022



Comments:	Activities to raise awareness on the benefits of water monitoring have sensitized up to 714 local leaders and decision-makers with 72 professionals additionally trained. A total of 149 measuring structures have been executed out of the 348 planned for 2020. This progress has been possible through the mobilization of 14 specialized technical groups (GTS). The set-up of six additional GTS to prepare 245 technical files is planned for the upcoming months with procurement packages to launch in June 2020 and amounting close to US\$ 2 million. The procurement of additional measuring and data transmission equipment is planned for September 2020. The PIU also brought to the World Bank team's attention a flaw in the wording of this indicator, which suggests a baseline of no existing water rights; this is not true, certain rights exist already. A decision to restructure this indicator was deferred to Mid-term Review.			
<b>► Number of water quality points monitored on a periodic basis (Text, Custom)</b>				
	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	04-Dec-2019	13-Aug-2020	30-Dec-2022
Comments:	Plan in place for periodic monitoring in selected basins, coordinated with AAAs and ALAs.			
<b>► An increase in collection fees (retribución económica) for use of surface, groundwater and discharge of wastewater (Text, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No increase in collection fees.	No increase in collection fees.	No increase in collection fees.	20% increase in collection of water use and discharge fees.
Date	14-Mar-2017	04-Dec-2019	13-Aug-2020	30-Dec-2022
Comments:	Not yet initiated, depends on results from monitoring system that is being installed. Perforations in the three GW locations have begun.			
<b>► Number of water resources related conflicts adequately addressed by ANA (Text, Custom)</b>				
	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	04-Dec-2019	13-Aug-2020	30-Dec-2022
Comments:	Not yet progressed.			

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 30% of plans implemented)	6 plans with financing secured and under implementation
Date	14-Mar-2017	04-Dec-2019	13-Aug-2020	30-Dec-2022
Comments:	Contract awarded for development of 4 plans in the Atlantic watershed. First diagnostic completed for the Mayo Basin and under stakeholder consultations, while for the other Atlantic Basins progress is at early stages following sustained delays.			
► 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	04-Dec-2019	13-Aug-2020	30-Dec-2022
Comments:	Outline for Cultura de Agua program developed for the Atlantic Watersheds. ANA will finance these as complementary actions through the RDR2 budget with a total amount of around S./ 2.35 million.			
► 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	04-Dec-2019	13-Aug-2020	30-Dec-2022
Comments:	Not yet initiated, depends on data collection and analysis, which is ongoing.			

### Performance-Based Conditions

#### Data on Financial Performance

#### Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
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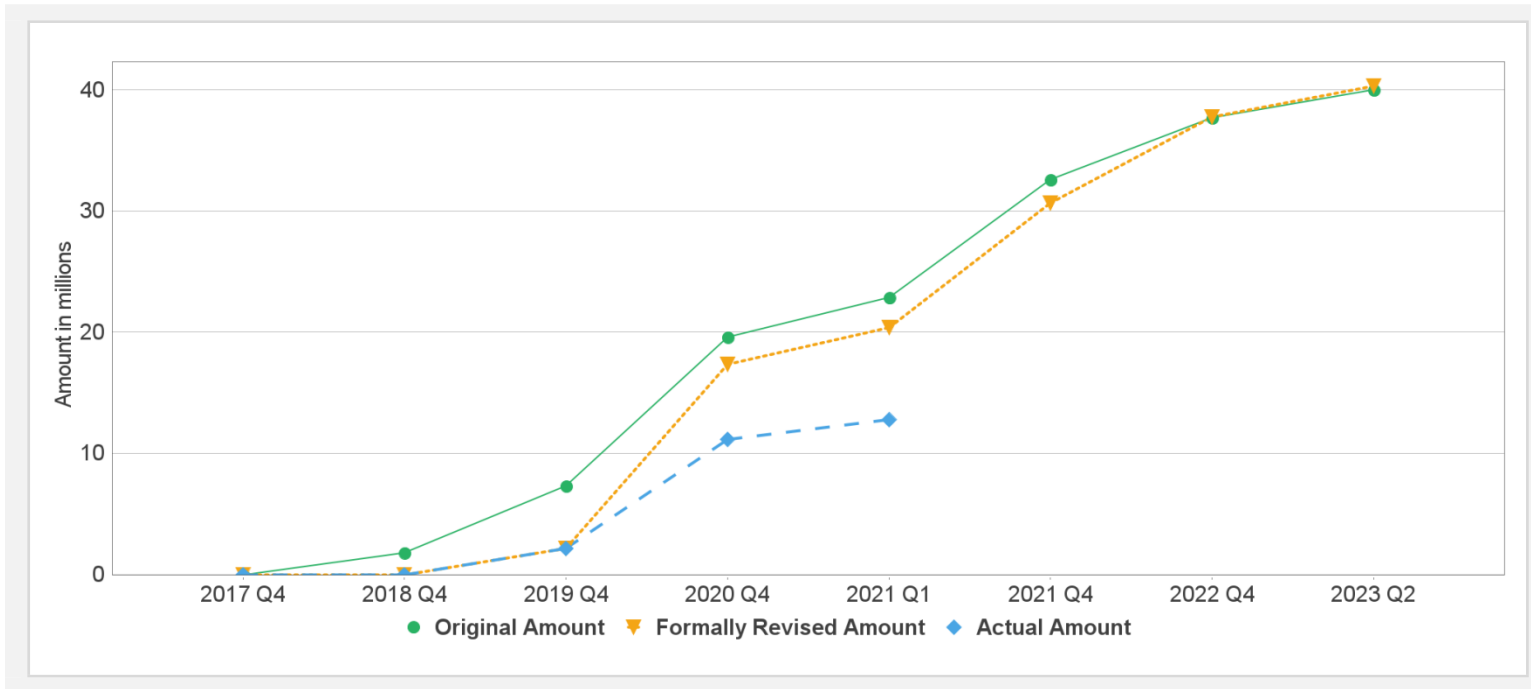


P151851	IBRD-87400	Effective	USD	40.00	40.00	0.00	12.77	27.23	<div style="width: 32%; height: 10px; background-color: #28a745;"></div>	32%
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**Key Dates (by loan)**

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**



**PBC Disbursement**

PBC ID	PBC Type	Description	Coc	PBC Amount	Achievement Status	Disbursed amount in Coc	Disbursement % for PBC

**Restructuring History**

There has been no restructuring to date.

**Related Project(s)**

There are no related projects.