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NATURAL INFRASTRUCTURE FOR WATER SECURITY

FY2020 Q3 REPORT

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EXECUTIVE SUMMARY

The third quarter of Fiscal Year 2020 (FY2020) was dominated by the global COVID-19 pandemic, a public health crisis of unimagined scale, which in turn has caused unprecedented economic and social disruption. The national state of emergency and nationwide quarantine lasted in Peru from March 15, 2020, until June 30, 2020. Now, after over 400,000 confirmed cases and over 19,000 deaths attributed to COVID-19 in Peru, the government is beginning to loosen restrictions on social and economic activity. However, several regions remain under a quarantine and state of emergency, and there are still significant restrictions – and significant risks – associated with any social contact, especially for remote communities with poor access to basic services.

In this context, the Natural Infrastructure for Water Security (NIWS) mission is more important than ever. Investing in the sustainability of our water resources through natural infrastructure restoration and conservation is fundamental to public health and resilience to shocks like the current pandemic. These investments can also serve as an important boost to rural economies in the context of a national economic reactivation and stimulus program underway. Supporting and incentivizing rural areas to effectively protect natural infrastructure – rather than to turn to it as a short-term economic resource in times of great economic need – is especially urgent. Given this context, we have emphasized activities this quarter which will set up natural infrastructure investment as a clear, practical solution to contribute to a resilient recovery to the current crisis. Our team has continued to develop projects, tools, communications, and capacities during this period, having efficiently and fully transitioned to remote work. To support this focus and adjust activities in response to COVID-19 related restrictions, we submitted an Adaptive Management update to our FY2020 Work Plan to USAID in April.

Despite this extraordinary and challenging context, NIWS continued to deliver important contributions to securing effective investments in natural infrastructure for water security in Peru. For example, the newly-launched NIWS Virtual Classroom trained 123 project developers and evaluators on preparing investments in natural infrastructure for disaster risk management under Reconstrucción Con Cambios; we launched a new course to build capacities and to develop 14 new projects with 70 regional government, water utility, and local government officials; and we advanced the diagnostics and project profile for 9 new projects under SEDAPAL's MERESE portfolio. We published the User Guide for our HIRO-GRD tool with the Ministry of Agriculture and Irrigation, and we published a new policy brief on the impacts of infiltration trenches. We published accessible guidance on how to use new IOARR guidelines to accelerate investments in natural infrastructure and confirmed pilots with counterparts for applying this innovative new mechanism. We advanced key legal protections for high-Andean peatlands in close coordination with MINAM. And we launched our Women's Leadership Program on Water Management, beginning a rich series of capacity-building and exchange among its first class of 88 women leaders active in water and natural resources management in priority regions.

Objective 1: Enabling Environment for Improved Natural Infrastructure

This quarter NIWS' online engagement ramped-up substantially, capitalizing on the opportunity of our stakeholders spending more time online by increasing and deepening the online content produced by the

Project. Our social media engagement more than doubled this quarter, reaching more than 1.4 million people, with some platforms quadrupling their reach compared to last quarter. Likewise, our revamped webinar series more than tripled participation rates compared to previous quarters, with an average of about 700 attendees in each webinar, and participation in monthly Technical Platform meetings increased with these meetings moved to virtual fora. Press coverage of NIWS activities was also exceptional this quarter, reaching more than 4.4 million people on key issues such as the incorporation of natural infrastructure into Reconstrucción con Cambios and women's leadership in water management.

Moreover, with NIWS' support, investigative journalism exposed illegal extraction of peat in Lima's watersheds, and MINAM advances legal remedies to this critical threat. MINAM's Public Prosecutor's Office filed a criminal complaint with the Criminal Prosecutor of Matucana regarding the illegal peat extraction in Carampoma, and MINAM presented a proposed Supreme Decree for the Defense and Protection of Wetlands, which will strengthen the existing legal framework around wetland degradation. Each of these advances were developed with NIWS experts over the last six months.

Objective 2: Information Management Improved for Decision-Making on Natural Infrastructure

This quarter NIWS and MINAGRI published the Methodological Guide for HIRO-GRD, NIWS' Rapid-Focus Tool for the Identification of Natural Infrastructure Investments for Disaster Risk Management, which is helping to identify and justify investments in over a dozen priority watersheds under Reconstrucción con Cambios. NIWS also established a collaboration with the Ministry of Housing, Construction and Sanitation (MVCS) to adapt and apply HIRO to calculate the gaps in the conservation of water sources that are critical to drinking water supplies for urban and rural populations as part of the update to the National Sanitation Policy, which could represent hundreds of millions of soles in new investment in natural infrastructure from the sanitation sector in the coming years.

NIWS published a research summary and policy brief titled, "Impact of infiltration ditches on water and soil: what do we know?" and continued development of the NIWS Research Agenda, which is incorporating results from the ongoing meta-analyses. The Research Agenda will, in turn, guide a new scholarship program to support research that addresses priority knowledge gaps; this quarter, the design of that program was finalized and NIWS began supporting 4 researchers in a pilot round of the program.

NIWS also continued to systematize information and produce analysis that will improve natural infrastructure intervention design and evaluation. In this quarter, the multitemporal analysis of land use change in five prioritized basins (Chira-Piura, ChiRiLuMa, Mayo, Tambo-Moquegua and Quilca-Chili) was completed, which will be used to inform a series of analyses such as the HIRO-MERSE tool, modeling of hydrologic benefits through CUBHIC, and basin-level hydrologic modeling exercises using SWAT and KINEROS. NIWS also applied the CUBHIC methodologies published in Q2 to a broader set of projects in the NIWS portfolio, thereby initiating a new testing phase for the methods that is generating lessons that will contribute to improving the methods in FY2021.

Objective 3: Portfolios of NI Projects Designed, Financed, and Implemented

During this quarter, NIWS continued to advance a pipeline of over \$66M in potential natural infrastructure investments toward mobilization. Of these, approximately \$45M in investment is in the stage of project development, and about \$21M are in the final stages of detailed work planning, certifications, and approvals that we expect to lead to mobilization in the near term, pending COVID-19 impacts on these processes.

Within this portfolio, NIWS secured notable advances with the projects under development for SEDAPAL by a group of NGOs, one university, and one consulting firm in Lima; despite restrictions related to the pandemic, 8 projects completed their initial diagnostics and proposals for project interventions, and 1 project presented a complete pre-investment study. This community of practitioners receiving NIWS technical assistance and advancing together in project development also represents an important source of future project developers for SEDAPAL and other MERESE programs.

NIWS brought our capacity-building strategy fully online this quarter and leveraged it to support project development with priority clients. The first course to utilize the new NIWS Virtual Classroom (<https://aulainfraestructuranatural.org>), implemented in April as one of the Project's key adaptive management measures to COVID-19, was developed and executed with MINAGRI in the framework of Reconstrucción Con Cambios investments. The course concluded in June, having trained 123 project developers and supervisors on public investments in natural infrastructure for disaster risk management; over a dozen Integrated Plans are also receiving additional NIWS technical assistance to develop investments for this program. Additionally, this quarter NIWS kicked off a new course with the National School of Public Administration (ENAP) on public investment in natural infrastructure, which is designed to build capacities while advancing pre-investment studies for 14 public investment projects in natural infrastructure.

Building on the new guidelines published by MINAM in December 2019 which now allow Investments in the Optimization, Marginal Expansion, Rehabilitation, and Repositioning (IOARR) to be applied to natural infrastructure, this quarter NIWS disseminated new infographics that serve as guidance for project developers on how they can use IOARR to accelerate investments in natural infrastructure. We also defined two pilot applications of the guidelines, with counterparts GORE Lima, GORE Cusco, and SERNANP, which will be developed in the coming quarters.

Gender Strategy

In June, we launched the Women's Leadership Program for Water Management, as part of the Natural Infrastructure for Water Security activity's efforts to close gender gaps in the water sector. Eighty-eight participants represent a range of key areas of water governance, including local and regional government officials, public servants in the water sector, experts from civil society, and undergraduate and graduate students exploring water and natural infrastructure from a range of academic disciplines. Through the program, participants will receive training on water resources governance, natural infrastructure

management, and on taking gender approach in water resources management, as well as training on soft leadership skills; they will also have a chance to exchange with experts in the field and with each other.

Moreover, building on the high-level ratification of commitments to mainstream gender in ANA and SUNASS in February, this quarter NIWS advanced institutional diagnostics to serve as baselines for Gender Action Plans. At the project level, we continued iterative development and application of guidelines for incorporating a gender approach in public investment projects for natural infrastructure.

ACRONYMS

ANA	National Water Authority
ChiRiLu	Chillon, Rimac and Lurin (watersheds)
CUBHIC	Cuantificación de Beneficios Hidrológicos de Intervenciones en Cuencas
EPS	Water utilities
FONAM	National Environmental Fund (“Fondo Nacional del Ambiente”)
GOP	Government of Peru
GORE	Regional government
GOLO	Local government
HIRO	Herramienta para Identificación Rápida de Oportunidades (NIWS Rapid-Focus GIS Tool)
IOARR	Investments in Optimization, Marginal Expansion, Rehabilitation and Repositioning
MEF	Ministry of Economy and Finance
MIMP	Ministry of Women and Vulnerable Populations
MINAGRI	Ministry of Agriculture and Irrigation
MINAM	Ministry of Environment
MERESE	Mecanismos de Retribución por Servicios Ecosistémicos
NGO	Non-governmental organization

NI	Natural infrastructure
NIWS	Natural infrastructure for Water Security Project
ODS	Decentralized Offices of SUNASS
OECD	Organización para la Cooperación y el Desarrollo Económicos
PAGCC	Action Plan on Gender and Climate Change
PIP	Public Investment Project
PMO	Optimized Master Plan (of water utilities)
PPR	Budgets by results ("Presupuestos por Resultados")
PROFONANPE	Peruvian Fund for the Promotion of Natural Protected Areas ("Fondo de Promoción de las Áreas Naturales Protegidas del Perú")
RCC	National Authority for Reconstruction with Changes ("Reconstrucción con Cambios")
SEDACUSCO	Water utility servicing Cusco ("Servicio de Agua Potable y Alcantarillado de Cusco")
SEDAPAL	Water utility servicing Lima ("Servicio de Agua Potable y Alcantarillado de Lima")
SEDAPAR	Water utility servicing Arequipa ("Servicio de Agua Potable y Alcantarillado de Arequipa")
SENAMHI	National Hydrology and Meteorology Service
SPDA	Peruvian Society of Environmental Law
SUNASS	National Superintendence of Water and Sanitation Services
UPCII	Institutional Promotion, Training and Image Units
USAID	United States Agency for International Development

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SOLUCIÓN INTEGRAL

para el control de ríos de la Costa con el objetivo de prevenir desastres

¿QUÉ ES UNA SOLUCIÓN INTEGRAL?

Una solución integral consiste en un conjunto de intervenciones en la parte alta, media y baja de los cuencas que permiten la protección de la población y cultivos ante eventos climatológicos extremos.

¿QUÉ ZONAS ESTÁN EN RIESGO DE INUNDACIÓN?

Las zonas que están en riesgo de inundación son aquellas que se encuentran cerca a un río sin protección cuando el caudal de este es superior al normal.

PROBLEMÁTICA ¿POR QUÉ SE PRODUCEN LAS INUNDACIONES?

Por la falta de estructuras de gestión de agua, almacenamiento, regulación y laminación para el control de las aguas de lluvia, así como por la falta de mantenimiento y/o limpieza de los canales.

19 ríos y 5 quebradas de la costa peruana tendrán Solución Integral

Ríos: Tumbes, Zorritos, Piura, La Leche, Chiclayo-Lambayeque, Olmos, Matupe, Zaña, Chicama, Viró, Llacramarca, Casma, Huancayo, Huaura, Cañete, Rimac, Mala, Ica y San Juan Motupe.

Quebradas: San Isidro, El León y San Carlos en La Libertad; Huayabombillo en Lima y Lamas en Ica.

EJEMPLO: RÍO PIURA

¿QUÉ SUCEDE EN ÉPOCA DE LLUVIAS?

1 En épocas de lluvia, las aguas discurren hasta el río Piura.

2

Las aguas desbordan los canales, del río y se inundan las poblaciones.



ESTRATEGIA DE INTERVENCIÓN EN RÍOS Y CUENCAS

I ETAPA - Emergencia

Las acciones en esta etapa tienen como objetivo inmediatas y corresponden a limpieza y descolmatación de ríos y quebradas desde Tumbes a Ica, evitando los efectos del reforzamiento con riego a suelos en zonas muy vulnerables a cargo de MINAGRI, gobiernos regionales y gobiernos locales.

II ETAPA

Las acciones en esta etapa son de carácter preventivo y corresponden a la construcción de estructuras de almacenamiento y control de caudales.

III ETAPA - Mediano y largo plazo

Las acciones en esta etapa consisten en la implementación de Soluciones Integrales mediante la construcción de obras de gran envergadura como: diques, represas, embalses, sistemas de alerta temprana e infraestructura verde, y en el control de riesgos con los recursos tecnológicos de mayor grado como: georradar, georadar, muros de retención, abogeo, monitoreo, entre otros.

En el ámbito de los embalses, se considera la construcción de estructuras de almacenamiento y control de caudales (como: represas, embalses, muros de retención, muros de contención, entre otros).

Dentro de las infraestructuras verdes, se consideran la forestación, restauración y mantenimiento de quebradas.

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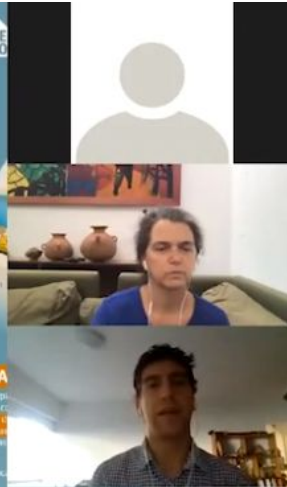
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Dentro de las infraestructuras verdes, se consideran la forestación, restauración y mantenimiento de quebradas.



Screenshot of the April webinar “Rapid identification tool for opportunities in natural infrastructure for disaster risk management” (Source: YouTube.com)

Objective I: Enabling Environment for Natural Infrastructure Improved

IR 1.1: Political and public awareness increased on the effectiveness of NI to secure water supply and increase resilience and the need for NI investments

1.1.1 Implement NIWS branding plan and project communications

In response to the pandemic, this quarter NIWS ramped-up significantly our online presence, with an emphasis on highlighting the connection between ecosystems, water, and public health. Our communications campaign, *Ecosistemas: Cuidarlos es Cuidarnos*, generated an increase of more than 242% in NIWS' network reach, with more than 1.4 million people reached and more than 70,000 interactions through the various NIWS platforms (see Table 1). This was achieved primarily through the intensive use of two media channels: Facebook and Direct Marketing via e-mail.

Table 1. Social media and web engagement on NIWS partner platforms, Q3 FY2020

Platform	Posts	Audience Reached	Engagement
Web CONDESAN	5	1,141	-
Web Forest Trends	5	2,602	-
Web Actualidad Ambiental (SPDA)	4	1,907	5,434
Facebook CONDESAN	27	283,424	23,154
Facebook Forest Trends	44	885,449	22,232
Facebook SPDA	24	110,654	8,475
Twitter CONDESAN	14	21,200	1,017
Twitter SPDA	28	64,150	2,617
Twitter Forest Trends	6	7,823	349
MailChimp (e-mail)	16	24,020	7,837
TOTAL	173	1,402,370	71,115

NIWS took advantage of the social distancing measures implemented for COVID19 to hold 7 webinars during this quarter. The webinars in this period far surpassed our historical average, which we attribute partly to increased online engagement during the pandemic and partly to a range of innovations implemented by the Project, detailed below:

Increased outreach:

- Targeted advertising on Facebook by region, for the Andean region, and for the following topics: public officials / environment / water / hydrology.
- Dissemination of webinars through the REDINFOR network, which reaches more than 30,000 people throughout the country.
- Sending the announcement to the entire NIWS database, which has more than 7,000 people.
- Promotion through the official networks of the NIWS Consortium, USAID, Canada, MIMP, and MINAM.
- Internal communications within SUNASS and ANA inviting their professionals to the webinar, achieving an average participation of 30 representatives per webinar.

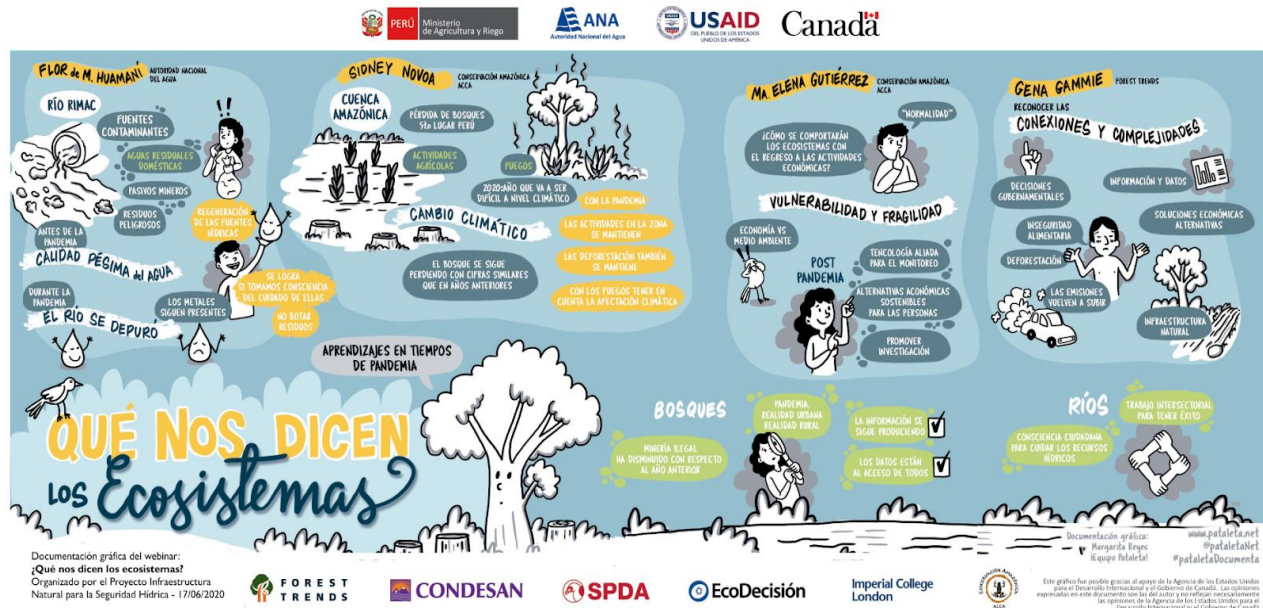
Program development:

- Association of a webinar with the launch of a publication (e.g. briefs, guide, infographics, interactive sheet).
- Association with the press campaign for Reconstruccion con Cambios, which reached about 4.5 million people through 20 press releases in the media.
- Identification and involvement of new audiences, such as young people, journalists, and communicators
- Together with ANA, hosted the first web seminar on the effect of COVID19 on ecosystems, which presented unpublished information on the effects of the pandemic on the Rimac River and the Amazon rainforest. More than 30 high level decision makers attended.

Execution of the webinar:

- Use of 'Live' platforms with large reach.
- Audience participation through two tools: Zoom Polling and www.mentimeter.com, with good feedback from participants.
- Use of graphic harvesting to visually document the main ideas of the webinar; the resulting infographic is distributed to the participants at the end of the event (see Figure 1).

Figure 1. Graphic harvesting infographic generated during the June webinar, “COVID-19: What do the ecosystems tell us?”



Post-Webinar Follow Up:

- Questions and Answers: All questions received during the webinar (an average of 50 to 150) are answered and mailed to all participants.
- Follow up emails to all participants, including the presentation, link to the recorded video, and reference documents.
- Satisfaction surveys to all participants.
- Video recordings of the webinar are edited and uploaded the next day.
- Digital certificates of attendance for all participants.

The 7 webinars for the quarter involved a total of 4,960 participants. The announcement for the webinar reached a total of 535,985 people via social networks, in addition to dissemination through the official networks of MINAM and ANA. The webinars featured 11 government and civil society organizations as panelists or co-organizers, as well as audience participation from more than 250 organizations from all over Peru, including EPS, Ministries, SUNASS, ANA, Local and Regional Governments, NGOs, Consultants, Universities and the private sector (See Table 2 for details).

Table 2. Summary of NIWS Webinars held during Q3 FY2020

Name of webinar	Date	Platform	Speakers	Number of participants
Launch of HIRO: Rapid identification tool for opportunities in natural infrastructure for disaster risk management	04/22/20	Zoom	Francisco Román, Leader of the research component of NIWS Natalia Aste, Specialist in Geographical Analysis for NIWS Beatriz Dapozzo, Director of Cadastre, Zoning and Ordering of SERFOR	915
Active role of youth in the conservation of ecosystems	04/28/20	Zoom and FB Live	Diego Padilla, Executive Director, Centro Urbes. Comments: Christian Ipanaqué, Member of the "Lomas de Pamplona" collective María Angélica Villasante, INSH project	629
The IOARR route for ecosystem projects: investments in optimization, marginal expansion, rehabilitation and repositioning	5/06/2020	Zoom	Yessica Armas - Investment Specialist NIWS Nancy Zapata - Investment Consultant Angela Cárdenas - Head of the Office of Multiannual Investment Programming of the Ministry of the Environment	647
Impacts of infiltration ditches on water and soil: what do we know?	05/20/20	Zoom	Boris Ochoa - Imperial College London Helder Mallqui -INAIGEM National Institute for Research in Glaciers and Mountain Ecosystems Milber Epiquien- AGRORURAL	953
Reconstrucción con Cambios: sustainable solutions with natural infrastructure	05/27/20	Zoom	Abel Aucasime, Senior Coordinator at NIWS. Alberto Marquina, Director of Integral Solutions of the Authority for Reconstrucción con Cambios-ARCC. Agridipino Jiménez, Executive Director of the Irrigation Subsectoral Program - PSI of the Ministry of Agriculture and Irrigation - Minagri. María Guadalupe Martínez, Coordinator of the Functional Unit for Territorial Planning and Disaster Risk Management of the Vice Ministerial Office of Territorial Governance of the Presidency of the Council of Ministers - PCM.	669
COVID-19: What do ecosystems tell us? learning about the pandemic	06/17/20	Zoom and FB Live	Gena Gammie, Deputy Director of the NIWSProject. Flor de María Huamani, specialist in Quality Management and Evaluation of Water Resources, National Water Authority. María Elena Gutiérrez, Executive Director, Conservación Amazónica-ACCA	607
Roadmap for investments in natural infrastructure	06/24/20	Zoom	Yessica Armas - Investment Specialist NIWS Doris Rueda - Specialist from the Office of Budget and Multi-annual Investment Programming - MINAM Miguel Angel Bernuy - Specialist in Financial Instruments General Directorate of Economy and Environmental Financing - MINAM	540

In April, NIWS published the 8th issue of its quarterly newsletter. The newsletter was shared through the NIWS database of more than 7,000 contacts and through Redinfor, a network of more than 30,000 members interested in sustainable development in Peru. There were a total of 2,391 views of the document, representing a growth of 442% since the last quarter. This growth can be attributed to the redesign of the newsletter, which includes new sections and a more fluid structure that favors the search of information and improves the user experience.

In May, NIWS made important changes to its website, including uploading recent publications, videos and events. The site address was transferred to www.infraestructuranatural.pe, so that the contents can be

edited by a local team. Additional programming changes were made to optimize the site operation. The website is now the first result shown by www.google.com when searching for 'infraestructura natural', as a result of the improvement of several sections for better positioning in web search engines.

146 new images have been uploaded to the Flickr page this quarter, which now totals 2,619 images and 137,268 site visits since its creation.¹

1.1.2 Develop and implement communications strategies for raising public awareness, for national policymakers, and in new sectors.

Press campaigns

This quarter, NIWS carried out two press campaigns that consistently reached over 3 million people. One campaign reported the progress of incorporating natural infrastructure into Reconstrucción con Cambios plans (20 stories reached over 4.4 million people), while the other launched the Women's Leadership Program for Water Management (12 stories reached over 3.1 million people). For details on media coverage, see Annex 6.

Investigative Journalism Feature on Illegal Peat Extraction

In early July, Ojo Publico published an in-depth investigative journalism report on the illegal extraction of peat in the Carampoma wetlands, which has continued during the quarantine (see <https://bit.ly/TraficoBofedales>). The report was developed with NIWS experts from SPDA, CONDESAN, and Forest Trends, as well as with contributions from members of the Carampoma community, over the last six months.

Journalist Workshops

During this quarter, NIWS continued to develop the third edition of the "Investigative Journalism Workshop for Water Security: Disaster Risk Management and Economic Development", which is scheduled to start between August 10th and 17th and run for a duration of four weeks. Due to the transition to a virtual format, the workshop is expected to have a participation of up to 50 journalists from all regions nationwide.

Support for journalism on natural infrastructure through the journalist fund

In this year's iteration of the Journalist Fund, the aim is to receive between 15 to 20 journalistic proposals for review. The selected proposals will be disseminated through the media outlet in which the selected journalist works. NIWS will evaluate proposals gathered through the "Investigative Journalism Workshop for Water Security: Disaster Risk Management and Economic Development". The winners and their proposals will be announced towards the end of the training. This workshop will help the journalists to prepare better proposals.

¹ Flickr page: <https://www.flickr.com/photos/infraestructuranatural/>

1.1.3 Develop and deploy communications campaigns for upstream communities

In the Chira-Piura Watershed, NIWS implemented the campaign "Get to know the water route in Piura: from the páramo to your home," in alliance with the Chira-Piura watershed council and the Piura Regional Government (see Figure 2). Additionally in Piura, NIWS and the Piura Water Communicators Network have published a report on the water cycle and the importance of ecosystems in the context of the pandemic. The objective of the campaign was to educate the region about the importance of the conservation of the paramo for water supply; the infographic also highlighted the role of ecosystems in the upper watershed for managing flood and landslide risks. This public education aims to support upcoming decisions on investments in the region, by the regional government, EPS Grau (Piura's water utility), and Reconstrucción con Cambios. This campaign involved 2 radio spots, social media graphics, 1 infographic, 2 videos and 1 press release. In the coming quarters, NIWS aims to replicate this campaign in Quilca-Chili (Arequipa) and Vilcanota-Urubamba (Cusco) in coordination with the ANA, who has expressed interest in the initiative. The infographic can be downloaded at this [link](#) and the videos can be found [here](#).

Figure 2. Infographic "From the páramo to your home"



Promotion of MERESE with MINAM

Towards the end of the quarter, a meeting was held with the MINAM communications team as a response to their interest in implementing the MERESE communication kit produced through the NIWS Incubator, which focuses on frequent questions and misconceptions about MERESE on the part of local communities who could participate as contribuyentes. They discussed plans to promote a digital and print MERESE communication toolbox for local and regional governments in priority basins, as well as

virtual workshops to present the kit and its applicability to communicators. In the following quarter, an implementation plan for the toolbox and workshops will be developed.

I.1.5 Strategically communicate benefits of natural infrastructure to priority audiences (briefs, web products).

This quarter, NIWS produced 5 publications:

- Infographic: Which strategic assets align with IOARR in Ecosystems?
- IOARR Interactive Roadmap
- Brief: Impacts of infiltration ditches on water and soil: What do we know? (for details, see Section 2.1.4)
- Brief Summary: Impacts of infiltration ditches on water and soil: What do we know?
- HIRO User Guide: Rapid Identification Tool for Opportunities in Natural Infrastructure for Disaster Risk Management (for details, see Section 2.2.1)

These documents were downloaded 2,458 times in the last quarter.

IOARR Infographics and Communications Strategy

This quarter NIWS initiated a targeted strategy for project developers and natural infrastructure specialists, promoting the use of IOARR for natural infrastructure. Messaging focused especially on the opportunity this mechanism offers now for rapid actions to recover ecosystems and as an opportunity for local and regional economic reactivation after the pandemic.

As part of this strategy, NIWS produced and disseminated an infographic entitled, “Which strategic assets align with IOARR in Ecosystems?” (see Figure 3). This infographic details assets associated with ecosystem functions and ecosystem management which are suitable for IOARR investments. The infographic can be downloaded [here](#).

Figure 3. Infographic: Which strategic assets align with IOARR in Ecosystems?



Additionally, NIWS produced an online feature, “Roadmap to plan investments in ecosystems” (see Figure 4). This interactive online infographic showcases the investment alternatives that Invierte.pe offers for projects that mitigate or reverse deterioration of the environment. The roadmap guides the user in identifying opportunities appropriate for investment and circumstances in which IOARR should be considered. The interactive infographic can be accessed [here](#), and its printable version can be found [here](#).

Figure 4. Interactive Infographic: Roadmap to plan investments in ecosystems



During Q3, this strategy to highlight the opportunity presented by the new IOARR guidelines for natural infrastructure achieved the following results:

- Production and the dissemination of 4 IOARR graphics for social networks including 2 infographics in PDF, an interactive online roadmap, and a question and answer document (which has yet to be published).
- 2 specialized webinars with a total participation of 1,078 people and the dissemination of their video recordings
- Creation of a database of project developers, which now includes 586 local and regional government officials.
- During the initial month, a total of 211,696 people were reached through social networks.

World Water Day Campaign

The "Water Week" campaign was suspended by the ANA due to the COVID19 emergency, however, NIWS and ANA are coordinating the virtual implementation of the "Women of Water" photography exhibition for World Water Day. The exhibition, which will feature a selection of winning photos from the "Reflejos de Igualdad" contest, will highlight the fundamental role of women in the management of water resources and the existing gaps for their participation in decision-making spaces.

NIWS reach of international stakeholders

The webinar series on natural infrastructure in particular has served to illustrate international interest in NIWS activities. A total of 526 international participants attended these webinars, primarily from Ecuador, Bolivia and the USA. There was also a smaller representation of participants from Colombia, Argentina, Mexico and Canada. International participants mainly represent Ministries, Research Centers, Municipal Governments and NGOs.

IR 1.2: High level roadmap to optimize use of natural infrastructure in Peru developed

1.2.1 Convene and charter Advisory Board

Technical Platform Meetings

NIWS continued to promote exchange and collaboration among the NIWS Technical Platform members, holding four virtual meetings of the platform this quarter and in early July. The virtual meetings have succeeded in securing more participation than previous in-person meetings, with an average of 35 participants from Technical Platform members including MINAM, MIMP, SUNASS, SERFOR, ANA, MINAGRI, USAID, and Canada. Topics discussed this quarter included:

- HIRO – Rapid-Focus Tool for the Identification of Natural Infrastructure Investments: presentation of the tool and opportunities for adaptation for new sectors
- Advances under the NIWS Incubator: identification of opportunities for natural infrastructure investment in Ica-Huancavelica and development of the Expediente Tecnico for the Chancay-Huaral PIP
- Principal findings of systematic reviews on key natural infrastructure interventions: impacts of reforestation and infiltration trenches on water and soil
- Construction of a research agenda on natural infrastructure for water security

1.2.3 Develop, publish and launch Common Vision on Natural infrastructure report

As noted in our previous report, last quarter NIWS reviewed and prepared feedback to the OECD’s Draft Report on recommendations to improve water policy and governance in Peru. This quarter, NIWS consolidated our comments and presented them to MINAM and the OECD. We have also begun to develop content for a targeted campaign with key recommendations we believe should be prioritized in the final Roadmap developed by Peru in the next stages in this process. NIWS also began to coordinate next steps in the process with MINAM; due to the pandemic, MINAM and the OECD are reviewing the schedule for the production and dissemination of the OECD’s final report.

IR 1.3 GOP Planning Instruments Incorporate Natural Infrastructure

1.3.2 Support incorporation of natural infrastructure into priority planning instruments at national level

Implement Legal Protection to Address Illegal Harms to Ecosystem Supported by MERESE

As described in previous quarters, SPDA continued to lead this quarter on two strategies to strengthen legal protections for ecosystems supported by MERESE, with a focus on high-Andean wetlands and peatlands, in response to increasing pressure, particularly due to the unlawful extraction of peat. This quarter these efforts resulted in the following key advances on the legal-regulatory front (for details on investigative journalism supported under this strategy, see Section 1.1.3):

- MINAM’s Public Prosecutor's Office filed a criminal complaint with the Criminal Prosecutor of Matucana regarding the illegal peat extraction in Carampoma. The complaint, filed July 3rd, initiates an investigation into criminal activity. NIWS supported the development of this complaint by contributing to establishing relevant facts and legal justification.
- MINAM presented a proposed Supreme Decree for the Defense and Protection of Wetlands, which was also developed with NIWS support. Through this Supreme Decree, MINAM seeks to strengthen the existing legal framework around wetland degradation, including by establishing new legal consequences associated with intentional degradation, like the peat extraction seen in Carampoma. The regulatory proposal was based on a proposal entitled, “General provisions for the protection and defense of wetlands,” presented by SPDA in May. Vice Minister of Environment Gabriel Quijandria announced in July that the proposal will be presented to the

National Wetlands Committee for validation by its members—including Ministry of Production, ANA, SERNANP IIAP, IMARPE, and SERFOR. The pre-publication of this proposal will undergo the formal regulatory process of approval, which involves feedback and comments from the public.

Proposed Law to Declare Investment in the Restoration of Andean Terraces of National Interest

This quarter, NIWS collaborated with SEDAPAL to prepare a technical-regulatory proposal to promote the recovery and rehabilitation of terraces. The proposal highlights terraces' contributions to water security in order to declare them a national interest. If passed, the law would help to prioritize and streamline investments in this important indigenous infrastructure.

1.3.3. Support incorporation of Natural Infrastructure into public investment, focusing on Invierte.pe gaps and Presupuestos por Resultados.

NIWS prepared a proposal for regulatory reforms that aim to simplify the environmental certification procedure for MERESE projects. The proposal consists of two regulatory modifications: i) the exclusion of these projects within the framework of the National System of Environmental Impact Assessment (SEIA); and, ii) the inclusion of an Environmental Technical Data Sheet as a complementary environmental instrument for projects excluded from the SEIA.

Similarly, NIWS also prepared a proposal for regulatory reforms that aim to simplify the procedures for obtaining authorizations for managing archaeological remains for MERESE projects. This proposal outlines three paths to achieve this goal: i) the exclusion of natural infrastructure projects that are comprised of activities and not civil works infrastructure from the scope of Archeological Monitoring Plan; ii) the exclusion of natural infrastructure projects that aim to rehabilitate pre-Hispanic infrastructure such as amunas or qochas from the scope of the Archeological Investigation Project; and iii) the creation of a procedure to save time by simultaneously processing Clearance Certificate of an Area Free From Archeological Remains and Archeological Monitoring Plan.

1.3.4. Facilitate coordinated natural infrastructure implementation for water security at the landscape level through approval of Natural Infrastructure in GIRH plans, EPS PMOs, and local/regional development plans

SEDAPAL's 2020-2025 Optimized Master Plan

This quarter, NIWS coordinated new project ideas with SUNASS's Tariff Regulation Department. This was a result of NIWS' technical assistance to SEDAPAL for the preparation of its Optimized Water Plan (PMO) for 2020-2025 and the coordination between EGASE and SUNASS (which will regulate the MERESE component of the upcoming PMO).

I.3.5 Build institutional capacity, with a focus on local and watershed level institutions, to increase women's participation in decision-making on natural infrastructure and water resources

SEDAPAL Institutional Capacity-Building

In conjunction with SEDAPAL's EGASE group, NIWS developed a preliminary roadmap for Public Investment Projects in natural infrastructure. The roadmap outlines the complexity and diversity of the various groups that must work together with EGASE during the development of a Public Investment Project in natural infrastructure. This roadmap has helped to identify the role each Area, Team, Unit and/or Management Division in SEDAPAL has in developing a natural infrastructure project from an initial idea. NIWS will continue to refine the process next quarter, exploring shorter and more efficient pathways.

Considering that there will continue to be obstacles and challenges to mobilizing large-scale projects in the future, NIWS, PROFONANPE and SEDAPAL have been exploring opportunities for the administration and execution of natural infrastructure investments by an Environmental Fund. This is an important way to diversify investment modalities in natural infrastructure by involving an organization which is specialized in the subject and will be able to develop and execute projects with greater speed and efficiency. This will allow the development and execution of larger scale interventions which require greater cost and cover a greater area.

Next quarter, NIWS will continue to work with SEDAPAL to identify the inputs and procedures necessary to transfer funds from SEDAPAL to PROFONANPE.

Mainstreaming Gender in Water Sector Institutions

Building on the high-level ratification of commitments to mainstream gender in ANA and SUNASS in February, this quarter NIWS advanced institutional diagnostics to serve as baselines for Gender Action Plans. As reported in Q2, this analysis is being led by specialized consultant teams assigned to each institution, working closely with specialists from NIWS and MIMP as well as with task forces set up in each institution. The analysis this quarter was primarily based on the review of documents such as the Multiannual Sector Strategic Plan (PESEM), Institutional Strategic Plan (PEI), Operational Plan (POI), Personnel Development Plan, and budgets, as well as other policy and strategy documents. Additionally, teams carried out interviews with officials in SUNASS and ANA in May and June. While coordination with counterparts, specifically organizing interviews and focus groups, was interrupted due to the pandemic, activities have since resumed and the diagnostics for both institutions are expected to be completed in July.



Alpaquera activity uses the water provided by the high Andean wetlands that the project seeks to protect in coordination with national authorities and the local population. (Photography: Forest Trends)

Objective 2: Information Management Improved for Decision Making on Natural infrastructure

IR 2.1 Information generation for decision-making on natural infrastructure improved

2.1.1 Develop coordinated prioritized agenda for research, tool development, and capacity building

This quarter, NIWS worked with a research group convened by MINAM to support the updating of the National Environmental Policy. Specifically, NIWS briefs on amunas and on forestation are contributing to the updated policy.

NIWS continued to gather information from decision-makers and stakeholders to inform priorities in the NIWS Research Agenda under development, including by utilizing webinars held this quarter to solicit research priorities from participants. The Research Agenda will be developed with the results of the ongoing meta-analyses and these priorities for decision-making.

2.1.2 Systematize relevant hydrometeorological datasets and socio-economic datasets and process for use in NIWS analyses

In this quarter, the multitemporal analysis of land use change in five prioritized basins (Chira-Piura, ChiRiLuMa, Mayo, Tambo-Moquegua and Quilca-Chili) was completed. The study produced updated maps of the vegetation cover and land uses in these basins, as well as changes in these parameters between years 2000, 2010, and 2019. This geospatial information will inform a series of analyses around Natural Infrastructure such as the HIRO-MERESE tool, modeling of hydrological benefits through CUBHIC, and basin-level hydrologic modeling exercises using SWAT and KINEROS. Next quarter NIWS will start a similar study in the Vilcanota-Urubamba basin, which has a greater area and complexity as it covers both Andean and Amazonian zones.

2.1.3 Strengthen, expand, and facilitate hydrological and socio-economic monitoring network

Local Hydrological Monitoring

With the NIWS Environmental Monitoring and Management Plan (EMMP) approved this quarter (see Section 4.3), our team has secured all relevant approvals from USAID to move forward with installation of new hydrological monitoring equipment, including small weirs. Once fieldwork resumes, pending COVID-19 related restrictions, we anticipate installing new equipment especially in priority sites for hydrological monitoring, such as Piuray, Cusco and Tupicocha, Lima.

Likewise, activities to download and service monitoring equipment at sites in the Samanga and Huamantanga learning sites have been suspended until fieldwork resumes. There is no risk of data loss on the equipment, since these devices were selected for their operational capacity of 6 months. However, there is a risk that dirt may plug the devices and impact the sensitivity of the measurements.

NIWS is designing a security protocol for field activities that will be validated with local counterparts prior to resuming any field activities (see 4.3 Adaptive Management).

iMHEA Annual Assembly

The date and format of the iMHEA Assembly have been changed due to mobility restrictions and social distancing measures caused by the pandemic. The iMHEA assembly will now take place virtually in July. The agenda will include reviewing the research agenda for the regional network and updating the iMHEA protocol and specific monitoring protocols, as well as any other issues that emerge at the meeting.

As part of the coordination for the assembly, NIWS shared a survey with the 17 members of iMHEA, in order to take stock of its first 10 years and prepare a strategic plan for the next 10 years that includes: i) new monitoring protocols; ii) an information system to manage the hydrometeorological database; iii) non-scientific use of shared data; and iv) a common research agenda.

Additionally, the iMHEA website (<http://imhea.org/>) has been updated with better information about the monitoring sites, based on feedback from NIWS. The updated version will be presented during the virtual sessions of the iMHEA Assembly. The website is continually improving, as partners update and add more information for each site.

Hydrological Monitoring Protocols

One of the central tools that has guided members of the iMHEA network to date is the iMHEA Methodological Guide for the Hydrological Monitoring of Andean Ecosystems, elaborated in the period 2010-2013 based on the experience of a group of collaborators and experts in hydrological monitoring of Andean ecosystems. In coordination with iMHEA members and key decision-makers, particularly MINAM and SUNASS, this quarter NIWS scoped an updated Methodological Guide to support improved and expanded hydrological monitoring through the network, as well as to support hydrological

monitoring for public investments promoted and supervised by MINAM and SUNASS. The updated Methodological Guide for the Hydrological Monitoring of Andean Ecosystems will include new methods for comparing the hydrological response of basins, complementing iMHEA's signature paired watersheds approach with approaches like nested basins. It will also include protocols for monitoring an expanded set of indicators, including indicators for water quality and erosion. The new protocols will continue to follow the principles that have allowed iMHEA to be successful in its first 10 years, for example assuring that protocols respond to information needs at relevant scales and that protocols are practical and low-cost to implement and maintain.

CONDESAN and Imperial College London began developing content to update the Methodological Guide this quarter, along with other members of the iMHEA network according to their areas of expertise. In addition, to support the timely development of new protocols, NIWS developed Terms of Reference to hire specialists to prepare various protocols related to monitoring: i) Andean micro-basins; ii) precipitation; iii) flow; iv) turbidity and sediment transport; v) hydrophysical properties of the soil; and vi) isotopic tracers. These consultancies will be carried out next quarter under the close supervision of iMHEA leadership and in coordination with public counterparts SUNASS and MINAM.

“State of the Science on Natural Infrastructure”

As reported last quarter, the "State of the Science of Natural Infrastructure" event has been cancelled for this fiscal year, due to the COVID19 pandemic.

2.1.4 Facilitate active learning, knowledge management and capacity-building with natural infrastructure agenda partners

Prepare meta-analyses of current state of knowledge

This quarter, NIWS published the policy brief titled, “Impact of infiltration trenches on water and soil: what do we know?” (see Figure 5). There are two versions of this brief, the complete document and its summary. Both versions present the results of a literature review of existing scientific knowledge around the world regarding the impacts of infiltration ditches on water ecosystem services, particularly on water and soils in mountainous areas. This document can be downloaded [here](#). More than 850 attendees participated in the launch webinar in May.

Figure 5. Brief “Impacts of infiltration ditches on water and soil What do we know?”

Impactos de las zanjas de infiltración en el agua y los suelos: ¿Qué sabemos?

Bruno Locatelli^{1,2}, Jan-Markus Homburger^{2,3}, Boris F. Ochoa-Tocachi^{4,5}, Vivien Bonnesœur^{4,6}, Francisco Román^{4,6}, Fabián Drenkhan^{4,7} y Wouter Buytaert^{4,8}

USAID, Canadá, FOREST TRENDS, CONDESAN, SPDA, EcoDecisión, Imperial College London

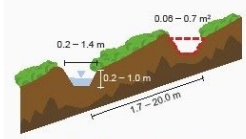


3. Resultados

Las publicaciones incluyeron estudios con modelación y con mediciones de escorrentía y pérdida de suelo en intervenciones con zanjas de infiltración. Los estudios se realizaron a múltiples escalas, desde cuencas hasta parcelas, en áreas que van desde 44 m² hasta 1040 ha.

Algunos estudios también evaluaron los impactos de las zanjas de infiltración en las propiedades del suelo o el crecimiento de las plantas en un conjunto de puntos en lugar de un espacio como una parcela o una cuenca. Se encontraron diversos usos del suelo y cobertura vegetal en los estudios, incluyendo tierras cultivadas (30% de las observaciones), pastizales (30%), matorrales (20%) y plantaciones forestales (20%).

Las zanjas de infiltración también variaron en características espaciales como anchura, profundidad, distancia entre zanjas y área de sección transversal (ver Ilustración 4).



3.1. Los efectos de las zanjas de infiltración sobre la infiltración son inciertos

Directa de conocimiento No se pudo encontrar un efecto significativo de las zanjas de infiltración sobre las tasas de infiltración de agua en los suelos, porque solo hubo dos estudios con datos detallados¹¹. Es sorprendente que hubo muy pocos estudios sobre los efectos de las zanjas de infiltración, precisamente, sobre la infiltración.

Probable La reducción de escorrentía encontrada en muchos estudios podría interpretarse como un aumento de infiltración. Según la teoría hidrológica, se supone que una parte del agua de escorrentía retenida en las zanjas termina infiltrándose, pero no se sabe con certeza, debido a que una parte de esta agua retenida puede también evaporarse.

Probable El diseño de zanjas debe ajustarse a la capacidad de infiltración de agua en el suelo¹². Si la infiltración del suelo es alta, la zanja apenas se llenará y pequeñas zanjas serán suficientes. Si la infiltración del suelo es baja, habrá demasiado desbordamiento o menos que las zanjas sean grandes. Además, una capacidad de infiltración demasiado baja podría conducir a la permanencia del agua durante mucho tiempo, lo que puede dañar las zanjas, aumentar las tasas de evaporación o afectar la vegetación circundante.

NIWS also worked this quarter with the University of Leuven and AquaAndes to draft a new policy brief on the impacts of terraces on water and soil. We expect that brief to be published next quarter.

Additionally, meta-analyses on the role of natural infrastructure in disaster risk management continues to be developed by the University of Leuven with NIWS, and the meta-analysis on the role of high Andean grasslands in water security began development this quarter.

This quarter, NIWS designed a database of information on natural infrastructure to consolidate all the articles gathered through the various meta-analyses and systematic reviews. This database will support research within the project, as well as external clients. NIWS is evaluating how best to make this information available to users and aims to make it public by the end of the fiscal year.

Support for research that addresses knowledge gaps

This quarter, NIWS concluded the design of the research grants program that will support new research that responds to critical knowledge gaps identified in the NIWS research agenda. The design clarifies the program objectives, the financing mechanisms for undergraduate, postgraduate and applied research projects, as well as different formats for the call, application, evaluation and monitoring of the program. The program will be launched with the NIWS Research Agenda, which we expect to be fully drafted for external review next quarter.

While the full-scale research program has been under development, NIWS has been supporting researchers in a pilot round of the program, based on a call held in Q2. The following theses have been selected under this pilot round, and began to receive NIWS technical and financial support this quarter:

- "Characterization of the hydrological function of ecosystems in two micro-basins within the Huamantanga - Lima rural community", to be implemented by Samanta Onocuica (UNALM).
- "Measurement of runoff indices to determine water availability, loss of vegetation cover, and soil degradation in the Millpu microbasin (Chincheró-Cusco-Peru) during 2019-2020", to be implemented by Sandro Arias (UNSAAC).
- "Influence of the landscape structure on water regulation: Case Study of the Apacheta sub-basin, Cachi basin, Ayacucho, during 2000 to 2018", to be carried out by Ida Vilca (UNALM).
- "Comparative study of the socio-economic and institutional factors that influence the adoption of hydrological management strategies based on ancestral technology and the use of technology for water security", to be developed in Huarochirí by Engelbert Barreto (PUCP).

The pandemic partially impeded the progress of these investigations. While it was possible to advance desk research, fieldwork had to be postponed. Certain objectives had to be reoriented to reduce the field work components. The temporary closures of the universities involved has also affected the schedule.

IR 2.2: Information sharing to support decision-making on GI improved

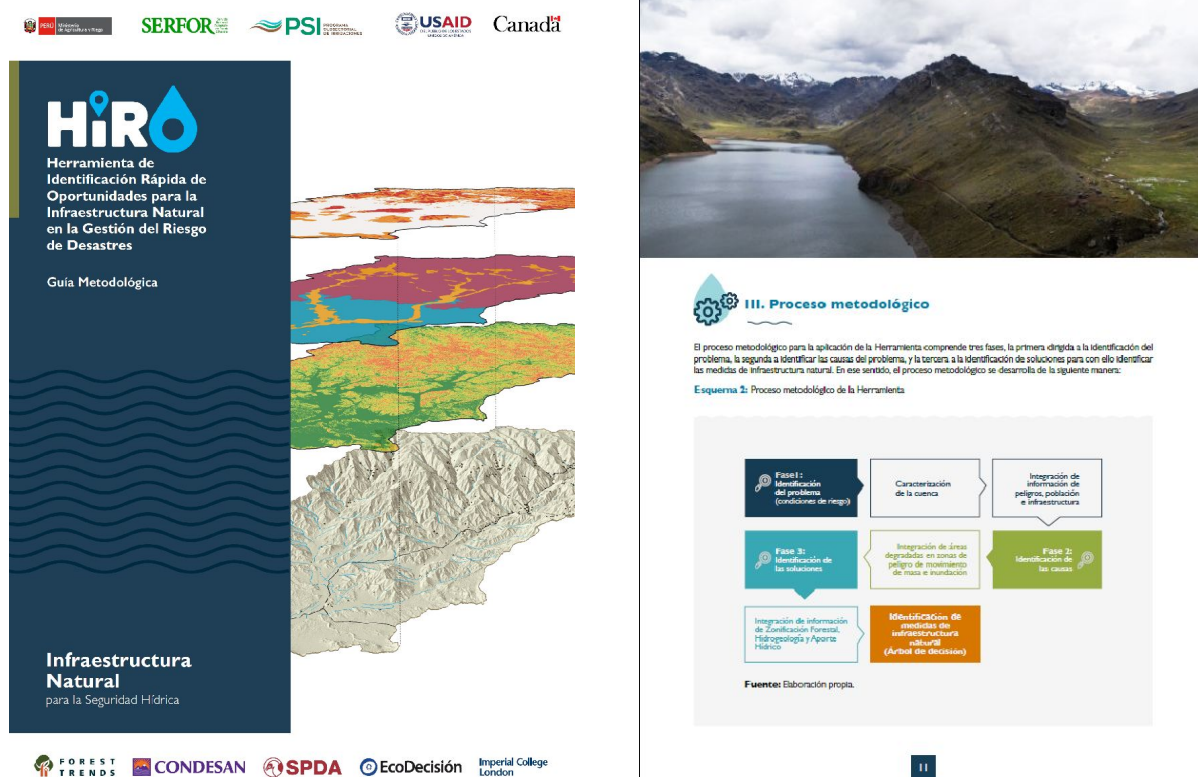
2.2.1 Build and deploy tools and capacities for rapid assessments on NI priorities within performance-based frameworks, including systems integration for access to basic data critical for rapid assessments

HIRO Rapid-Focus Tool for Natural Infrastructure Interventions for Disaster Risk Management (HIRO-GRD)

This quarter, the HIRO-GRD Methodological Guide, which was produced in collaboration with SERFOR and MINAGRI, was published and made available online [here](#) (see Figure 6). The tool allows users to quickly identify priority areas and suitable interventions in natural infrastructure to address flooding and landslides risks within a watershed, using official data from multiple national agencies. The guide provides an overview of the tool, its benefits and a step by step manual.

Results from HIRO-GRD runs in 17 watersheds prioritized by Reconstrucción Con Cambios (RCC) continued to inform the prioritization of investments in RCC Integrated Plans, and was included in course content presented to consulting firms and supervisors from public agencies during the Virtual Course on Investments in Natural Infrastructure for Disaster Risk Management held this quarter (see Section 4.1.2).

Figure 6. The HIRO-GRD Methodological Guide was published in April by NIWS with MINAGRI agencies SERFOR and PSI.



HIRO Rapid-Focus Tool for Natural Infrastructure Interventions for Hydrological Regulation and Erosion Control (HIRO-MERESSE)

As reported in previous quarters, NIWS has begun to build on the HIRO-GRD tool developed for rapid identification of investments in natural infrastructure for disaster risk management under RCC to build a sister tool, HIRO-MERESSE, that is optimized for prioritizing investments in natural infrastructure that support water supply. This development continued this quarter.

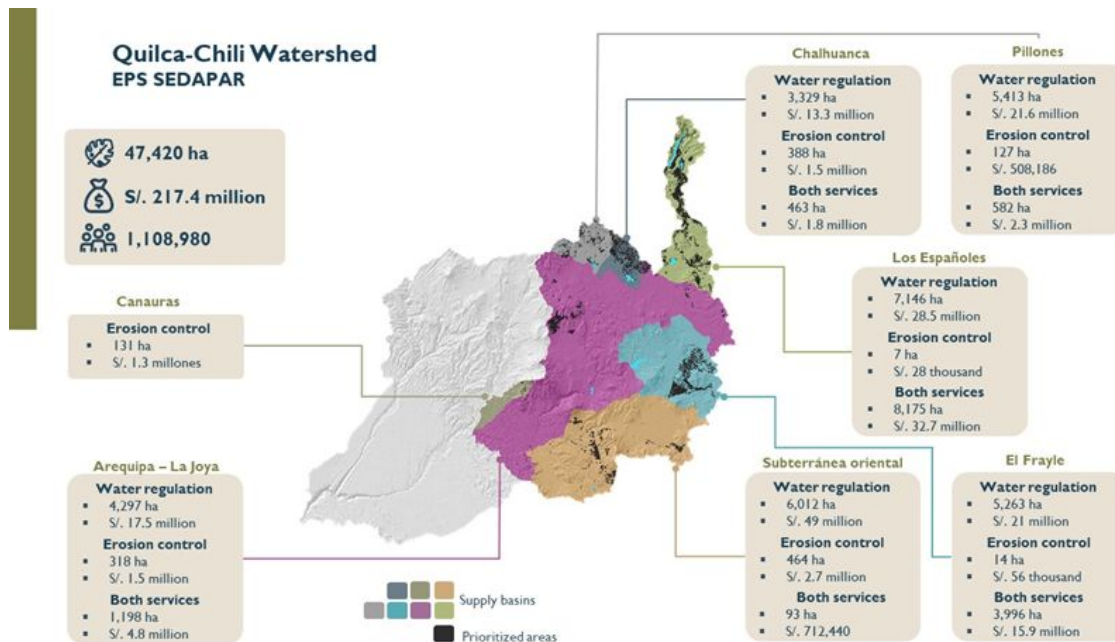
In May, NIWS began coordinating with the Ministry of Housing, Construction and Sanitation (MVCS) to use HIRO to calculate the gaps in the conservation of water sources that are critical to drinking water supplies for urban and rural populations. This effort is designed to contribute to the updated National Sanitation Plan, which will be published at the end of 2020 or early 2021. By establishing a quantified investment gap in the conservation of water sources for the sanitation sector, the National Sanitation Plan could drive significant new investments in natural infrastructure from the sanitation sector in the coming years.

In order to establish this gap, the HIRO methodology needed to be adapted to focus on the dependency of key water supply infrastructure on priority ecosystem services. NIWS has begun to develop these adaptations with MVCS, beginning with test runs in the Quilca-Chili, Tambo-Moquegua and Vilcanota-Urubamba basins (see Figure 7). In addition to identifying priority areas for investment,

HIRO-MERESSE is identifying potential natural infrastructure interventions, calculating the financial investment required to implement them, and estimating the potential number of beneficiaries. Moreover, general adjustments of the HIRO-MERESSE tool continue to be made, including adjustments to variables and processing. The results from the newly published degraded areas and land use maps are also being incorporated into the tool.

Next quarter, the tool will be presented, reviewed, and validated by local actors in NIWS priority watersheds, including local water utilities, SUNASS offices, and watershed councils. We expect to incorporate methodological adjustments based on feedback received during this process; the HIRO-MERESSE tool will then be run nationwide in order to estimate an investment gap to include in the updated National Sanitation Plan.

Figure 7: Preliminary results of HIRO-MERESSE in the Quilca-Chili, Tambo-Moquegua, and Vilcanota-Urubamba watersheds.

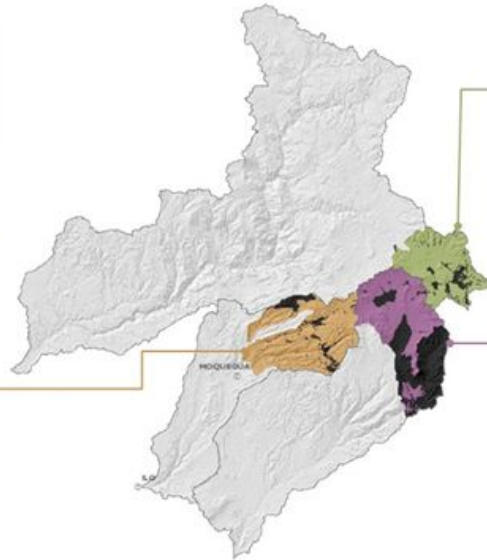


Tambo Moquegua Watershed

- 43,974.7 ha
- S/. 231.7 million
- 142,142

EPS MOQUEGUA Torata, Tumilaca, Huaracane

- Water regulation**
 - 3,886 ha
 - S/. 16.2 million
- Erosion control**
 - 2,142 ha
 - S/. 13.4 million
- Both services**
 - 231 ha
 - S/. 980 thousand



Supply basins
 Prioritized areas

EPS MOQUEGUA ANDILO Pasto Grande

- Water regulation**
 - 27,509 ha
 - S/. 156.5 million
- Both services**
 - 1,131 ha
 - S/. 8.2 million

EPS ILO Aricota

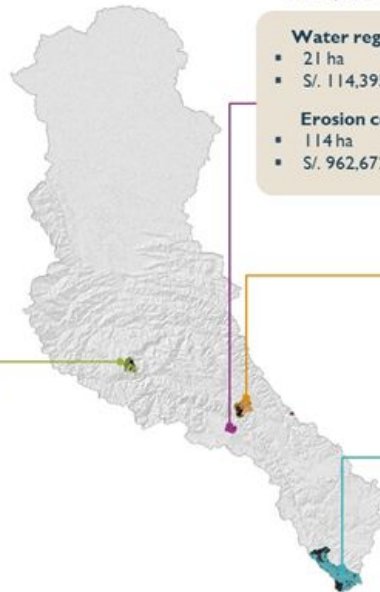
- Water regulation**
 - 8,112 ha
 - S/. 32.4 million
- Erosion control**
 - 7 ha
 - S/. 29 thousand
- Both services**
 - 957 ha
 - S/. 3.8 million

Vilcanota-Urubamba Watershed

- 12,493.4 ha
- S/. 58.8 million
- 560,422

EPS EMAQ Poromate

- Water regulation**
 - 4 ha
 - S/. 22 thousand
- Erosion control**
 - 336 ha
 - S/. 1.7 million
- Both services**
 - 161 ha
 - S/. 990,232



Supply basins
 Prioritized areas

EPS SEDACUSCO Piuray, Poromate

- Water regulation**
 - 21 ha
 - S/. 114,395
- Erosion control**
 - 114 ha
 - S/. 962,672

EPS EMSAPA CALCA Cochoc

- Water regulation**
 - 722 ha
 - S/. 4.6 million
- Erosion control**
 - 1,096 ha
 - S/. 8 million
- Both services**
 - 88 ha
 - S/. 859,307

EPS EMPSSAPAL Hercca, Tucuri, Japu

- Water regulation**
 - 7,682 ha
 - S/. 30.9 million
- Erosion control**
 - 1,091 ha
 - S/. 5.2 million
- Both services**
 - 1,179 ha
 - S/. 5.4 million

Catalogue of Natural Infrastructure Measures

This quarter, NIWS revised our proposed approach to develop a Catalogue of Natural Infrastructure Measures with MINAM. The original proposal shared in Q2 was revised to explicitly align with typologies for public investment under Invierte.pe. Likewise, NIWS agreed with MINAM to focus efforts under the Catalogue on the development of detailed technical specifications to support appropriate design of natural infrastructure interventions, based on the typology of the project, objective of the intervention, type of ecosystem, productive factors and causes of alteration or unsustainable use. Complementary products to the technical specifications under this catalogue may include unit cost analyses for each action and a database of references related to each intervention (e.g., meta-analyses, monitoring guidance, case studies). NIWS is developing a roadmap with MINAM to systematically produce this content over the coming quarters, which will serve as a critical reference for project developers and evaluators in the NIWS Project Design Toolbox.

Guidance for identifying priority investment areas under Performance-Based Budget I44

In Q3, NIWS concluded the technical support for the improvement of the proposed methodology for the identification, the categorization and prioritization of degraded areas within the framework of the Budget Program N° I44: Conservation and sustainable use of ecosystems for the provision of ecosystem services with MINAM and the pilots in Chira-Piura, ChiRiLuMa and Vilcanota-Urubamba. Afterwards, MINAM coordinated 5 sessions to transfer the methodology to its own team of specialists.

Furthermore, NIWS delivered to MINAM:

- The Google Earth repository for identifying degraded areas and estimating Forest Cover density
- Two toolboxes for ArcMap 10.7 and 10.3, which optimize the analysis of information within the categorization and prioritization processes
- Table of prioritization of degraded areas "PAD"
- Quick guides for the use of model builders in PDF format and recordings which explain the use of these tools

Regarding scaling this initiative, MINAM indicated that it is scheduled to carry out the Identification, Categorization and Prioritization of Degraded Areas in Cusco, Moquegua and Huancavelica this year and has plans to implement it at the national level in 2021.

2.2.2 Train portfolio designers, project developers on appropriate use of existing models and tools for quantifying the benefits of Natural Infrastructure, including explicit consideration of risks and uncertainties

During this quarter, NIWS held 4 webinars to share several tools to facilitate and understand investments in natural infrastructure and water management. See more information in Tabla 3 below.

Table 3. Webinar details

Webinar	Date	Presenters	Number of participants
Launch of Rapid-Focus Tool for Natural Infrastructure Interventions for Disaster Risk Management (HIRO-GRD)	04/22/20	Francisco Román, Objective 2 Lead of NIWS Natalia Aste - Specialist in Geographical Analysis for NIWS Beatriz Dapozzo - Director of Cadastre, Zoning and Ordering of SERFOR	915 participants 563 men 352 women
The IOARR route for ecosystem projects. Investment optimization, marginal enlargement, rehabilitation and reposition	05/06/20	Yessica Armas - Investment Specialist NIWS Nancy Zapata - Investment Consultant NIWS Angela Cárdenas - Head of the Office of Multiannual Investment Programming of the Ministry of the Environment	647 assistants 362 men 285 women
Reconstrucción con Cambios: Sustainable solutions with natural infrastructure	05/27/20	Abel Aucasime, Senior Coordinator at NIWS Alberto Marquina, Director of Integral Solutions of the Authority for Reconstrucción con Cambios Agridino Jiménez, Executive Director of the Irrigation Subsectoral Program of Minagri Maria Guadalupe Martínez, Coordinator of the Functional Unit for Territorial Planning and Disaster Risk Management of the PCM	669 participants 362 men 307 women
Roadmap for investments in natural infrastructure		Yessica Armas, Investment Specialist NIWS Doris Rueda, Specialist from the Office of Budget and Multi-annual Investment Programming, MINAM Miguel Angel Bernuy, Specialist in Financial Instruments General Directorate of Economy and Environmental Financing, MINAM	540 participants 294 men 246 women

2.2.3 Support systems integration and capacity-building for accessing data for qualitative and quantitative assessments of natural infrastructure

A methodological framework was developed to assess the end-user needs and the current state of the art of the available information systems (functionality and underlying technologies). Although it was

originally aimed to use this framework for the actual mapping in Q3 2020, this activity had to be postponed because it needed face to face coordinations on the field.

Instead, a desk-based study was implemented to review in detail the technical architecture of the open source information system developed by the Water Fund of Quito (FONAG) who have offered to make this system available for watershed councils and other end-users that currently do not have any system of their own or require updating their system. This review will better explain its functions to end-users.

2.2.4 Build new models and methods to address assessment needs; adjust existing models to reflect learning from monitoring network and natural infrastructure agenda

Following the publication of the first versions of NIWS' innovative CUBHIC methodologies in Q2, this quarter NIWS entered an intensive phase of application and sensitivity analysis on the methods, in order to better understand the strengths and challenges associated with the methodologies. We are also comparing CUBHIC outputs with data from the iMHEA network in order to validate results. NIWS is beginning by applying CUBHIC on the interventions in our project portfolio and has collected the necessary data to run the CUBHIC methodologies for 3 PIPs so far, as well as a potential set of new interventions in the riparian buffer of Lake Piuray. In this process, NIWS has involved the NGOs and consultants supporting project development for SEDAPAL in order to understand the user experience of these methodologies.

As a result of this testing phase, NIWS is identifying adjustments required for the methods, specifically regarding the equations of restoration and conservation of high Andean grasslands. Next quarter these adjustments will be consolidated into a workplan for producing Version 2 of the CUBHIC methods.

2.2.5 Build a network/cadre of new women leaders and champions for NI through Women in NI Leadership Program

In the previous quarter, NIWS redesigned the Leadership Program for a virtual format. In May of this quarter, NIWS publicly announced the program and made the selection of its participants. The program began in June and as of the date of this report Module 3 is taking place. The program began with a selected group of 88 participants. It is expected that at least 50 participants will successfully complete the Program.

For more information see Section 4.2 Gender.



Infiltration trenches in Piuray, Cusco, helps the local population to have good quality and quantity of water to maintain their livelihood. (Photography: Forest Trends)

Objective 3: Natural Infrastructure Projects are Designed, Financed, and Implemented in Vulnerable Watersheds

IR 3.1 Portfolio of Natural Infrastructure Projects Designed

3.1.1 Rapid stock-take, needs assessment, and refinement of priority watershed milestones and identification of learning sites with local counterparts

While COVID19-related limitations restricted our ability to work with local populations this quarter, we continued to develop investment proposals, evaluations of natural infrastructure interventions, and strategies for community engagement. These will not only serve efforts in our learning site communities but will also contribute lessons, models, and tools to the development of watershed-scale portfolios in our priority watersheds. This section reports progress in NIWS learning sites for this quarter.

Huamantanga Learning Site, ChiRiLu Watershed

Huamantanga continues to serve as a key learning site for developing investments in natural infrastructure; activities that advanced this quarter for the Huamantanga site are generating lessons and frameworks to inform SEDAPAL's community engagement strategy, technical specifications under the Catalogue of Natural Infrastructure Measures, and the design of performance-based contracts for ecosystem services.

As reported in Q2, during the presentation of the final profile of the Public Investment Project (PIP) for Huamantanga with community members in March, a handful of community members expressed doubts about the proposed project. This quarter, NIWS worked with SEDAPAL to develop a plan for clarifying and addressing questions presented by Huamantanga community members. Due to restrictions on travel and meetings related to COVID19, it was not possible to begin to implement this plan with meetings with community members. However, as part of this plan, NIWS agreed with SEDAPAL on a scope of work for a community relations specialist to support both the clarification of issues that may be identified by the community regarding the project, as well as dialogue within the community to arrive at a fair and sustainable internal benefit-sharing arrangement to address remaining concerns. We expect to begin to implement this plan next quarter, in line with the NIWS protocol for field visits currently under development. This experience in Huamantanga should also inform the broader community engagement strategy under development for SEDAPAL (see Section 3.2.6).

NIWS also began this quarter to develop technical specifications for five natural infrastructure interventions included in the Huamantanga PIP: (i) Amunas or Mamanteo Canals, (ii) Cochas, (iii) Infiltration Ditches, (iv) Grassland Restoration, and (v) Family Irrigation Systems. Once the PIP is validated by the Huamantanga community and by SEDAPAL, the technical specifications will be used in Terms of Reference for the development of the detailed project design (Expediente Tecnico) and project implementation. By clarifying SEDAPAL's expectations regarding the minimum analysis required for determining the detailed project design, assumptions on unit costs, and minimum quality standards for each intervention, the technical specifications should improve proposals and streamline the process for developing the Expediente Tecnico for Huamantanga. Likewise, these technical specifications will be adapted to serve as general references for other PIPs, as part of the Catalogue of Natural Infrastructure Measures (see Section 2.2.1).

Finally, NIWS initiated activities this quarter to design the first performance-based contract for ecosystem services in Huamantanga. To develop the contract terms, as well as the verification and payment scheme, NIWS selected a consulting team led by Bespoke Mitigation Partners, which has extensive experience developing and implementing performance-based contracts for regulated ecosystem services markets in the United States. The model developed by Bespoke Mitigation Partners with NIWS accompaniment will serve as a proposal for carrying out operation and maintenance tasks for the Huamantanga PIP, once the initial investment phase is complete. Bespoke will also propose a model for how the entire PIP could have been implemented through a performance-based contract, thereby offering a model that NIWS may be able to promote and apply in other settings. The models will need to adapt international best practice to the Peruvian regulatory framework, in particular Directive No. 039-2019 issued by SUNASS last year, which clarified implementation modalities available for water utility-funded MERESE programs.

Piuray-Ccorimarca Learning Site - Vilcanota-Urubamba Watershed

While our ability to communicate with SEDACUSCO and the Piuray-Ccorimarca Watershed Management Committee was interrupted due to the pandemic, NIWS advanced desktop evaluations of proposed natural infrastructure interventions for Lake Piuray, aligned with the work plan we agreed with SEDACUSCO in Q2. Complementing analysis carried out previously by NIWS Research Partner CIFOR, this quarter NIWS calculated the benefits of permanent vegetation cover on the marginal strip of Lake Piuray and compared it with other activities such as the implementation of sustainable agricultural practices in the contributing watershed. This exercise improved the modeling equations in CUBHIC that estimate hydrological benefits.

This technical assistance will be reviewed and advanced with SEDACUSCO next quarter, when communications and regular coordination can resume. Activities with the Piuray Ccorimarca Management Committee have been postponed due to difficulties with communication and mobilization.

Tumilaca Learning Site, Tambo-Moquegua Watershed

The Tumilaca technical document - developed along with Anglo American- is now finished. Anglo American is currently reviewing the technical document for final approval and to begin its implementation.

Other learning sites

The COVID19 emergency affected several activities, including the suspension of in-field training programs that had been planned for learning sites and a broader set of stakeholders in Quilca-Chili and Chira-Piura. NIWS will review whether these activities can resume once the COVID19 situation allows.

3.1.2 Design and implement M&E programs in learning site in priority watersheds

All of the implemented monitoring systems have continued to function, however, the download of recorded data and equipment maintenance could not be performed due to the COVID19 emergency. It is expected that these activities will be carried out in the next quarter.

3.1.3. Consolidate Project Design Toolbox and deploy broad capacity-building for project designers and evaluators in priority watersheds

Course on public investment project design and management for Local Government, Regional Government, and EPS officials

NIWS began the implementation of the “Specialization Course in Development of Natural Infrastructure projects for the recovery of ecosystem services of water regulation” with ENAP. The course started on June 3rd and will end in August. The call for participants was made to identify officials from Local and Regional Governments and EPS in the priority watersheds. Participants were required to apply to the course with a project idea associated with water regulation ecosystem services. After an evaluation of the applications, 13 projects were accepted. Throughout the course, the 70 participants will work on these projects in groups. At the end of the course, each of the 13 projects will be developed. The participating institutions have signed commitments to make these projects viable and to provide the participants with the support and information necessary for their active participation in the course. More information about this course can be found in Section 4.1.2.

Guidance on Designing Projects for Sustainability, Effectiveness and Equity

In FY2019, NIWS prepared guidance on designing natural infrastructure investments called the

“Sustainability, Effectiveness and Equity Scale (SEE) for the Evaluation of Natural Infrastructure Projects.” NIWS had planned to publish the document in May, however, this has been delayed due to an opportunity to conduct a feasibility test with the PIPs that are being developed. The test was carried out

this quarter and lessons learned were incorporated into the document. The document is now ready and should be published in the next quarter.

Project Design Toolbox

This quarter, NIWS implemented Version I of the NIWS Project Design Toolbox (<https://www.forest-trends.org/caja-de-herramientas/>). The Project Design Toolbox includes tools and guidance relevant to natural infrastructure project developers and evaluators in Peru. Currently, the Toolbox features 18 products produced by NIWS; as we improve the Toolbox over time, we will also. Efforts this quarter focused on producing the basic design, organization, and web functions of the toolbox; next quarter we will incorporate tools produced by other entities that are relevant for Peruvian stakeholders and develop more content to support selection among tools and their application. A final review will be done by NIWS team leaders and other interested parties, and then the Toolbox will be launched next quarter.

3.1.4 Develop a multi-sector, performance-based framework and baseline for Natural Infrastructure in priority watersheds

Chancay-Lambayeque Lessons Learned

In this quarter, NIWS completed the analysis of lessons learned based on hydrological modelling of natural infrastructure and application of the Decision-Tree Framework for Decision-Making Under Uncertainty that was carried out in Chancay-Lambayeque watershed with World Bank, ANA, and local stakeholders in FY2019. The analysis was produced with the expert support of Dr. Kate Brauman of the University of Minnesota and the NIWS team and resulted in an exceptionally rich discussion on the use of hydrological models to inform decision-making on natural infrastructure, using references from the Chancay-Lambayeque studies. Specifically, the analysis arrives at the following lessons for future watershed-scale assessments of natural infrastructure for water security that use hydrological models:

1. Carefully adapt the language and metaphors of water resource planning to natural infrastructure
2. Invest in understanding the decision context
3. Be clear about how hydrologic benefits are created, their potential magnitude, and the dynamics between built and natural infrastructure
4. Stage decisions and thoughtfully use appropriate tools, reflecting on the information provided by simple models before getting too deep into a project
5. Develop scenarios of both potential investments and expected degradation to compare hydrologic outputs
6. Select and set up a model that can represent the elements of natural infrastructure most of interest, but also consider all the factors in decision making that cannot be captured by a hydrologic model
7. Improving precision in modeling outcomes is only valuable when the additional information will influence a decision

The analysis has been prepared as a publication entitled, “Informing Natural Infrastructure Investment Decisions with Hydrologic Modelling: Lessons Learned from a Case Study in Chancay-Lambayeque Watershed, Peru.” NIWS is currently reviewing the publication with the consulting teams and stakeholders who were involved in the original Chancay-Lambayeque studies to validate findings and address potentially sensitive conclusions. We expect the paper to be launched publicly in September.

SEDAPAL Monitoring & Evaluation System

This quarter, NIWS worked with SEDAPAL to validate the parameters and workplan for detailed development of a multi-scalar hydrological and social monitoring and evaluation system for SEDAPAL’s MERESE program, Sembramos Agua. The parameters were developed based on information needs of multiple internal and external stakeholders, as well as analysis of the 33 projects that compose the first Sembramos Agua portfolio of projects. CONDESAN set up a hydrological model of the ChiRiLuMa watersheds in SWAT and KINEROS to represent the hydrological system in its current baseline, which will serve as a core component of the M&E system. To support the timely development of the hydro-ecological portion of the M&E system, NIWS worked with SEDAPAL to scope a consultancy and launched a public call to develop detailed protocols and a procurement plan for SEDAPAL. These protocols are expected to be developed next quarter.

Vilcanota-Urubamba

NIWS provided technical assistance to SEDACUSCO in their efforts to define investments under their new MERESE tariff, specifically to expand their MERESE program beyond Piuray-Ccorimarca into other priority areas for Cusco’s water supply. NIWS supported SEDACUSCO by reviewing terms of reference the utility had prepared to carry out a study to identify priorities in this broader geographical area. NIWS provided technical support for the proposed designs, including guidance on the use of the Ficha Tecnica Simplificada worksheet for water regulation projects and the use of the typology of “Support for Sustainable Use” for an organic agriculture idea, and the improvement of technical specifications and execution time.

Tambo-Moquegua

This quarter, NIWS designed a portfolio of initiatives for the Tambo-Moquegua priority watersheds. Two initiatives are from the GORE Moquegua, three are from the EPS Moquegua, and two more will be developed with Anglo American. This portfolio will serve as the basis for public and private financing negotiations in the upcoming quarters.

Quilca-Chili

In a similar process to that underway in Tambo-Moquegua, NIWS consolidated projects under development and project ideas to address water risks in Quilca-Chili. Project ideas were compared to and validated with the preliminary HIRO-MERESSE runs performed in Quilca-Chili watershed, which will be validated with local stakeholders next quarter (see also Section 2.2.1). NIWS also set up and refined a hydrological model of the current state of natural infrastructure and proposed projects. The results of this modelling exercise will be consolidated into a proposed portfolio of interventions to be presented

to the Quilca-Chili watershed council, including potential natural infrastructure investors from the public and private sectors, in upcoming quarters.

3.1.5 Leverage local capacity and technical tools to produce a "bottom-up" pipeline of performance-based projects

During this quarter, NIWS has continued to manage a pipeline of project ideas under development to respond to the interests of natural infrastructure investors and the needs in vulnerable watersheds. As of this quarter, NIWS is supporting the development of 39 projects, representing an estimated \$45M in NI investments, as outlined in Table 4 below.

Table 4. Pipeline of project ideas under development with NIWS support

N°	Project Name	Watershed	Targeted IN Investor	Estimated Investment Value (USD)
1	Recovery of high Andean wetlands and peat wetland ecosystems in SEDAPAL Marca II and Marca V project scopes, Marcapomacocha district, Yauli province - Junín	ChiRiLuMa	SEDAPAL	US\$3,851,393
2	Recovery of high Andean wetlands and peat wetland ecosystems in SEDAPAL Marca IV project scope, Santa Barbara De Carhuacayan district, Junín province, the state of Junín and Huayllay district, Pasco province - Pasco	ChiRiLuMa	SEDAPAL	US\$1,274,242
3	Water harvesting for the recuperation of water regulating ecosystem services in thea Quipacancha village lake, Laraos district, Huarochirí province - Lima	ChiRiLuMa	SEDAPAL	US\$ 484,848
4	Recuperation of the ecosystem services for water security through the management of natural grasses and peatland bogs in the head of the Pucullo creek, Chocna micro-watershed, San Mateo district, Huarochirí province - Lima	ChiRiLuMa	SEDAPAL	US\$ 393,939
5	Recuperation of ecosystems of hydrological interest in the Yamecoto sub-watershed to increase water availability during the dry season	ChiRiLuMa	SEDAPAL	US\$ 480,303
6	Restoration of the ecosystem servicios in the micro-watershed of the Huayca creek, San Mateo district, Huarochirí province - Lima	ChiRiLuMa	SEDAPAL	US\$ 903,030

7	Recuperation of the ecosystem services for water security in the Huitama micro-watershed, San Pedro de Casta district, Huarochirí province - Lima	ChiRiLuMa	SEDAPAL	US\$ 703,731
8	Recuperation of the water regulation ecosystem services of with “siembra y cosecha” (sowing and harvesting) of water in the Masaypata watershed and Ayas rural community in the Surco district, Huarochirí province - Lima	ChiRiLuMa	SEDAPAL	US\$267,924
9	Recuperation and conservation of the ecosystem services of the peatlands and high Andean grasslands of the Río Blanco for water security of the Yuracmayo dam	ChiRiLuMa	SEDAPAL	US\$ 581,836
10	Recuperation of the ecosystem services for water security through the management of natural grasses and peatland bogs in the head of the Ararac micro-watershed in the rural community of San Antonio, San Mateo district, Huarochirí province - Lima	ChiRiLuMa	SEDAPAL	US\$526,069
11	Capacity Building a los comuneros de Laraos para la recuperación de los servicios ecosistémicos y regulación hídrica en la microcuenca de Poccrococha, distrito de Laraos, provincia de Huarochirí, región Lima	ChiRiLuMa	SEDAPAL	US\$ 545,455
12	Recovery of Ecosystem Services and Restoration of ancestral Water Infrastructure in the community of Jicamarca, district of San Antonio, province of Huarochirí, Lima region	ChiRiLuMa	SEDAPAL	US\$757,576
13	Recovery of Ecosystem Services for Water Regulation in the buffer zone of the Bosque de Zárate reserved area, Quebrada Carnacha, district of San Bartolomé, Huarochirí province, Lima region	ChiRiLuMa	SEDAPAL	US\$757,576
14	Natural infrastructure investments in the Integrated Watershed Plan for Flood Control and Landslide of the Casma River Watershed	Casma	Reconstrucción con Cambios	US\$1,666,667

15	Natural infrastructure investments in the Integrated Watershed Plan for Flood Control and Landslide of the Mala River Watershed	Mala	Reconstrucción con Cambios	US\$1,969,697
16	Natural infrastructure investments in the Integrated Watershed Plan for Flood Control and Landslide of the Matagente River Watershed	Matagente	Reconstrucción con Cambios	US\$1,666,667
17	Creation of the recovery service for degraded forest ecosystems in the Moquegua region	Tambo - Moquegua	GORE Moquegua	US\$8,767,675
18	Creation of protection services with natural infrastructure of the catchment and conduction line of the water system of the Rio Ahuashiyacu district of La Banda de Shilcayo - province of San Martin - region of san Martin	Mayo	EMAPA San Martín	US\$688,421
19	Recuperation and conservation of the hydrological ecosystem services of the Quilca-Chili watershed, regulated zone, to improve the service of drinking water for the population, provided by EPS SEDAPAR S.A in metropolitan Arequipa	Quilca-Chili	SEDAPAR	US\$ 309,259
20	Recuperation and conservation of the hydrological ecosystem services of the Quilca-Chili watershed, Non-regulated zone, to improve the service of drinking water for the population, provided by EPS SEDAPAR S.A in metropolitan Arequipa	Quilca-Chili	SEDAPAR	US\$1,530,377
21	Protection of drinking water and sanitation networks in the torrent crossing area, Arequipa	Quilca-Chili	SEDAPAR	US\$606,203
22	Slope reforestation around the Aguada Blanca dam	Quilca-Chili	SEDAPAR	US\$303,030
23	Recuperation and conservation of the hydrological ecosystem services of the Quilca-Chili watershed, regulated zone, to improve the service of drinking water for the population, provided by EPS SEDAPAR S.A in metropolitan Arequipa	Quilca-Chili	SEDAPAR	US\$757,576
24	Ecosystem rehabilitation affected by forest fire, in the Historic Sanctuary of Machu Picchu, Cusco Region	Vilcanota - Urubamba	SERNANP	US\$757,576

25	Rehabilitation of Amunas of the community of San Andres de Tupicocha, Huarochiri province, Lima Region	ChiRiLuMa	GORE Lima	US\$ 757,576
26	Recovery of the Ecosystem Service for Water Regulation in the Micro-basins of the Peasant Communities of Anchalay and Hualambi, Jilili District, Ayabaca Province, Piura region	Chira-Piura	EPS Grau	US\$1,642,921
27	PIP Salitral Watershed, Alto Bigote	Chira - Piura	GORE Piura	US\$5,412,727
28	Recovery of the Water Regulation service in the middle and upper parts of the San Jorge and Yapatera Sub-basins, Frias District, Ayabaca Province, and Chulucanas and Santo Domingo Districts, Morropón Province, Piura region	Chira-Piura	GORE Piura	US\$757,576
29	Improvement and Expansion of the Retention, Storage and Regulation Service of Water Resources in the Moquegua River Watershed	Tambo - Moquegua	GORE Moquegua	US\$757,576
30	Recovery of the Ecosystem Services of the wetlands and grasslands of the dry puna of the Huaccoto micro-watershed, Callali district, Caylloma province, Arequipa region	Chira - Piura	GORE Arequipa	US\$ 224,795
31	Recovery of wetlands in the upper watershed of the Chancay-Huaral river	Chancay - Huaral	GORE Lima	US\$757,576
32	Recovery of ecosystem service for soil control in the Micro-basin of the Uquicha, Cuchachi and Urcuyacu state lands, Rioja and Moyobamba province, San Martín Region	Mayo	Proyecto Especial Altomayo	US\$757,576
33	Recovery of Ecosystem Services in the Chancay-Lambayeque basin, Alto Chancay-Lambayeque sub-basin, Quebrada Segse and Quebrada Las Trincas, located in the Catilluc District, San Miguel Province, Cajamarca region	Lambayeque	EPS Lambayeque	US\$757,576
34	Recovery of the water regulation ecosystem service in the micro-watershed of Chames, Pacaipampa District, province de Ayabaca, Piura	Chira-Piura	Gobierno Distrital de Pacaipampa	US\$545,454

35	Recovery of Ecosystem Services for Water Regulation, Cusiqocha Sector, Chinchero District - Urubamba Province - Cusco region	Vilcanota - Urubamba	Municipalidad Distrital de Chincheros (Cusco)	US\$757,576
36	Recovery of Degraded Soils through the installation and management of forest resources in the Torata district, Mariscal Nieto province - Moquegua region	Tambo - Moquegua	Municipalidad distrital de Torata (Moquegua)	US\$757,576
37	Strengthen local capacities and production of plantations, agroforestry and forest systems in the Ayabaca province - Piura	Chira-Piura	Fondo Concursable	US\$121,063
38	Building the blueprint and capacity for a scaled, community-based restoration economy in Moquegua, Peru (Proyecto Piloto Cambrune)	Tambo - Moquegua	Mitsubishi (Fondo Concursable)	US\$1,376,311
39	San Antonio de Chuca Pilot Phase	Quilca-Chili	Cerro Verde	US\$606,061
Total estimated investment for all project ideas or projects under development				US\$ 45,783,434

Major changes to this table compared to last quarter are:

- 13 investment ideas (2 from SEDAPAL, 1 from GORE Arequipa, 1 from GORE Moquegua, 1 from GORE Lima, 1 from GORE Piura, 1 from Proyecto Especial Altomayo, 1 from GOLO Paicapampa, 1 from GOLO Torata, 1 from EPS Lambayeque, EPS from Grau and 1 from EPS SEDAPAR) included for being part of the “Specialization Course in Development of Natural Infrastructure projects for the recovery of ecosystem services of water regulation” to be developed during Q4.
- 2 IOARR ideas are included: GORE Lima and SERNANP. INSH is currently searching for specialists to develop investment initiatives
- SEDAPAR project "no-regulated area" is included because the project idea has been developed in SUNASS format.
- CELEPSA project has not been included because coordinations with the company are on pause.

SEDAPAL Portfolio

Under our collaboration with SEDAPAL, we have contracted 5 NGOs, 1 university, and 1 consulting firm to develop projects for SEDAPAL’s MERESE portfolio. These contracts began in December 2019 after an open call and review of proposals with SEDAPAL. Execution was delayed in Q2 and Q3 due to capacity constraints (requiring longer periods for review and revisions of products) and restrictions on the teams’ abilities to visit local communities due to the rainy season and COVID-19. Nevertheless, in addition to the Huamantanga PIP already submitted to SEDAPAL, 9 projects worth a total estimated

investment of USD 4.8 M continue under development in this line, with all of these expected to be finalized and presented to SEDAPAL by the end of the fiscal year.

Project development by NGOs

Five NGOs and one university contracted by NIWS in December 2019 prepared the initial diagnostics and proposals of alternatives have been completed for 8 projects under development for SEDAPAL's MERESE portfolio. The development of the products by the NGOs have been supported with close technical assistance from NIWS, which has significantly improved their quality.

After NIWS' approval, the responsible organizations presented the diagnostic studies to SEDAPAL's environmental management team (EGASE), which made comments that have since been resolved. In addition, the organizations also submitted the Pre-investment Study, the Simplified Technical Sheet (FTS) and its appendices, which are under review by NIWS before being sent to EGASE.

Only one project was not able to complete these activities due to mobility restrictions in this period; this project, located in Masaypata in the upper Rímac watershed, will be placed on-hold and considered for development in FY2021.

As part of our technical assistance for the development of these projects, NIWS developed the "Cost Calculator" tool. The tool uses automated tables in Excel to support the cost analysis of projects in development. NIWS also evaluated 6 PIPs with the due diligence tool. The due diligence tool was designed last quarter in order to identify possible contingencies such as overlapping land rights, informational needs for environmental and archaeological certification, and conflicts between actors. The document "Preparation and application of the due diligence tool for investment projects in natural infrastructure" was prepared as a user guide.

In preparation for the next phase of development for these projects, NIWS worked with SEDAPAL to scope additional technical assistance on the incorporation of archaeological considerations in the development of investment projects. This consultancy, currently in the procurement process, will provide clear guidelines for procedures regarding approvals required from the Ministry of Culture to address potential archeological issues with natural infrastructure interventions, especially those that relate to indigenous technologies (e.g., amunas, terraces).

Next quarter NIWS and contracted organizations will develop full project proposals, which will be reviewed and validated with SEDAPAL by the end of the fiscal year. However, final approval of these projects will require them to be formally presented and reviewed with local communities, and for SEDAPAL to execute agreements with each local community. Due to current COVID-19 restrictions, community workshops are anticipated to take place in early FY2021.

Project development by consulting firms

NIWS also advanced two additional projects developed with the support of consulting firms, located in the communities of Laraos (Rímac watershed) and Huamantanga (Chillon watershed).

The Laraos project proposal is being developed through a consulting contract with MULTIBETA. This quarter, MULTIBETA submitted the pre-investment study, the Technical File and its respective appendices. The content was reviewed by the NIWS technical team, who submitted comments to the consultant which have already been incorporated. As of this writing, NIWS has sent the pre-investment study, the technical file and its respective appendices to EGASE for review and subsequent approval by SEDAPAL.

NIWS asked MULTIBETA to apply the CUBHIC methodology and integrate the resulting calculation of hydrological benefits into their proposal. MULTIBETA's use of the CUBHIC and feedback provided important recommendations to help improve the tool.

NIWS submitted the Huamantanga PIP to SEDAPAL, who has approved the document. In the next quarter, SEDAPAL will enter the project into the investment bank's system for review to continue with the approval process. For more information on the Huamantanga PIP development, see Section 3.1.1.

Other portfolios

NIWS continued coordination with SUNASS and EPS Moquegua for the development of an investment project for reforestation with native and exotic species, as well as protection of bofedales in micro-basins that offer high-quality water to the Canal Pasto Grande which supplies the EPS. The District Municipality of Torata has expressed interest in financing the execution.

This PIP will be designed by one of the groups from the 'Virtual course in the Identification and Development of Public Investment Projects in Natural Infrastructure for the recovery of water regulation ecosystem services' (see 4.1.2) formed by Lorena Silva (Anglo American), Franklin Flores (Torata District Municipality) and Walter Villasante (EPS Moquegua).

3.1.6. Unlock funds for effective, gender-equitable NI investments through targeted support through Incubator

This quarter progress was made for the following activities prioritized with government counterparts under the NIWS Incubator.

Territorial Management in the Ica - Huancavelica Watershed (MINAM)

To finish this activity, NIWS provided technical support to the MINAM for the delivery of the results of the documents prepared through the incubator including the Diagnosis of Degraded areas and Sustainable Use in the Ica-Huancavelica basin, the Comprehensive Program for Recovery, Conservation and Sustainable Use of Degraded Ecosystems in the Alto Pampas-Alto Ica Basins (RECUPERD HVCA-APAI) and the technical sheets describing project ideas for the Huancavelica Regional Government. With these documents, the GORE Huancavelica will be able to update its regional information and incorporate project ideas in its Multi-Annual Investment Planning, to facilitate investments in natural infrastructure.

Design and Implementation of a Hydrological Monitoring System in the Cañete Watershed (MINAM)

Thanks to the coordination of NIWS and MINAM for the implementation of the Hydrological Monitoring System in the Cañete Basin, MINAM has planned resources for the construction of weirs through its MERESE-FIDA project. Construction will begin once the state of the current emergency allows. After the construction begins, NIWS will purchase the hydrological monitoring equipment and training of its use.

Promotion of Natural Infrastructure in Water User Organizations (ANA)

NIWS developed the technical content for a new program entitled, “Training for Social Facilitators in Water User Organizations with a focus on Natural Infrastructure.” The objective of the program is to strengthen the management of water user organizations with regards to the incorporation of an integral view of the watershed, including an intercultural, intergenerational and gender approach. The technical content of the program was approved by the National Water Authority (ANA). The graphic design will be carried out next quarter before final delivery.

Recovery of the Ecosystem Services of Forests and Natural Grasslands in the Upper Chancay River Watershed - Huaral, Lima Region (ANA)

This quarter, NIWS increased its coordination with GORE Lima’s Department of Natural Resources and Environmental Management (GRRNyGMA), which made comments on the Technical File for the recovery of ecosystem services in the upper basin of the Chancay-Huaral river.

NIWS responded to the comments on the Technical File, as well as for the preparation of meetings with the Investment Executing Unit of the GRRNyGMA to obtain final approval of the document. Both the approval of the Technical File and its presentation to the communities participating in the project are expected in the upcoming quarter.

Implementation of disaster risk management measures that incorporate the environmental component in the Lurín river basin (MINAM)

At the end of Q1, NIWS initiated a consultancy under the Incubator in collaboration with MINAM, to build the capacities of local authorities in the Lurin watershed to develop public investments in natural infrastructure for disaster risk management. At the beginning of this quarter, NIWS and MINAM evaluated advances under this initiative and concluded that it lacked a sufficiently clear conceptual framework. In contrast, NIWS’ work with Reconstrucción con Cambios has allowed us to develop a robust conceptual framework with MINAGRI for these kinds of investments. After reviewing with MINAM, we agreed to reformulate this effort and focus on first refining and validating a clear conceptual framework for investments in natural infrastructure for disaster risk management with MINAM, and then develop capacity-building modules in the next fiscal year.

IR 3.2: Diverse and gender-equitable financial mechanisms and incentives (public and private) for investment in Natural Infrastructure mobilized

3.2.1 Assure early implementation of MERESE tariffs through SNIP, Invierte.Pe, and direct contracts (new mechanism)

Provide technical assistance by public investment specialist to address bottlenecks in PIP approvals in priority watersheds

By the end of this quarter, NIWS was providing technical assistance to mobilize mature investments totaling over USD 21 million (see Table 5). These projects all have the commitment of their respective payer, have advanced at least to a full draft of the project profile, and need just the final support to ensure they receive final approval by payer and local communities, in order to reach implementation.

Depending on the project, this last-stage facilitation may require facilitating negotiations, estimating detailed project costs to inform implementation terms of reference, preparing the detailed work plan (Expediente Técnico), and facilitating approvals by actors in water utilities, local governments, regional governments, or private companies. In some cases, where the original project design carried out before NIWS support was unclear (e.g., inadequate identification of ecosystem services), this stage requires deeper technical support. Often, this process is the first time each institution has gone through for a natural infrastructure investment, and so the facilitation can be complex and nonlinear.

COVID19 restrictions have inhibited significant progress in mobilizing investments this quarter, as fieldwork and meetings were suspended and many counterparts were not available for coordinating final reviews and approvals. Of the 11 projects receiving direct NIWS support for this last-stage facilitation, this quarter we saw important advances in six:

- Chancay-Huaral. After a complete review by the team in charge of the Technical File, economic activities that were not part of the recovery of ecosystem services typology were excluded. Thus, the project now costs over 1 million dollars less than before. Technical File is in final review by GORE Lima.
- Puzmalca and Moyobamba. Coordinations established with a team of professionals to carry out the administrative activities that allow the approval of the Technical File; these activities were interrupted due to COVID-19.
- Tumulaca. Technical Document finished. It is under final review by Anglo American.
- Huamantanga: see advances described in 3.1.1.
- New: Pichu Pichu. New investment initiative identified in GORE Arequipa's project portfolio. Its mobilization was promoted through the GORE's Natural Resources Management and a commitment for financing was obtained from the Regional Government. A call has been prepared to develop the Technical File.

Table 5. Projects receiving direct NIWS technical and financial support to advance to implementation

N°	Project Name	Watershed	Natural Infrastructure Investor	Estimated investment value (USD)
Investments Mobilized				
1	Recovery of the Ecosystemic Water Regulation Service of the Milloc micro-watershed, Carampoma District, Huarochiri Province, Lima Region	ChiRiLuMa	SEDAPAL	US\$907,909
Sub total Investments Mobilized				US\$907,909
Expediente Tecnico pending review				
2	ET Recovery of Ecosystem Services Natural Forests and Meadows Upper watershed of the Chancay-Huaral River, Lima	Chancay-Huaral	GORE Lima	US\$4,616,941
3	Recovery of the water regulation ecosystem service on the right bank of the Pusalca micro-watershed, in the Canchaque district, Huancabamba province, Piura	Chira-Piura	GORE Piura	US\$2,164,275
4	Recovery of the ecosystem service of water regulation, in the micro-watersheds of Rumiyacu, Mishquiyacu and Almendra, Moyobamba, San Martín Region	Mayo	EPS Moyobamba	US\$702,238
Subtotal, Expediente Tecnico pending review				US\$7,483,454
Viable Project Profile; Expediente Tecnico under development				
5	Recovery of the Water Regulation Service in the Pata and Uchupata micro-watershed of the San Miguel de El Faique district - Huancabamba - Piura	Chira-Piura	GORE Piura	US\$1,227,563

6	Recovery of the ecosystem erosion control service of soils in the Cachiyacu micro-watershed and in the operational units of Lamas, San José de Sisa and Bellavista, contribution areas of EMAPA San Martín S.A., of the department of San Martín	Mayo	EMAPA San Martín	US\$883,347
7	Pilot Phase. Tumulaca Project - Highland Forestry in Moquegua	Tambo-Moquegua	Anglo American	US\$ 212,121
Subtotal, Expediente Tecnico under development				US\$ 2,360,910
Project Idea accepted by investor; Project Profile under development/review				
8	Recovery of the regulatory and cultural ecosystem services of the Queñua foresto of Pichu Pichu, Chacaroto, Pocsi, Polobaya and San Juan de Tarucani districts, Arequipa province, Arequipa Region	Quilca - Chili	GORE Arequipa	US\$3,811,312
9	Recovery of water regulation ecosystem services of the Chillon watershed, Huamantanga district, Canta Province, Department of Lima	ChiRiLuMa	SEDAPAL	US\$3,137,374
10	Recovery of the Water Regulation Ecosystem Service in 07 Conservation Areas in the Quiroz and Macará Sub-watersheds, of the Ayabaca, Paimas and Pacaipampa Districts, Province of Ayabaca, Department of Piura	Chira-Piura	GORE Piura	US\$3,066,830
11	Recovery of water regulation ecosystem services of the Laraos watershed, Laraos District - Huarochirí-Lima Province	ChiRiLuMa	SEDAPAL	US\$604,477
Subtotal, Project Profile under Development/Review				US\$ 10,619,993
Total Investment Receiving NIWS Support to be Mobilized				US\$ 21,372,266

Support development and implementation of MERESE pilot projects through direct contracts (“Modality 2”)

As described in more detail Section 3.1.1, NIWS initiated activities this quarter to design the first performance-based contract for ecosystem services in Huamantanga. The proposed contract and verification scheme should be finalized by the end of the Fiscal Year. Forest Trends is also finalizing a review of international experience in contracting for ecosystem services to contribute to the development of this important implementation modality in Peru. This publication is also expected to be finalized next quarter.

Mobilize funds for public investment through IOARR

As reported in previous quarters, in December MINAM published new guidelines for applying the modality of Investments in the Optimization, Marginal Expansion, Rehabilitation, and Repositioning (IOARR) to natural infrastructure, which were developed with NIWS support. This quarter, NIWS consolidated two pilot cases for the first application of these guidelines. The objectives of the pilots are to demonstrate the environmental, social, economic, and administrative benefits of the new modality for implementing investments in natural infrastructure, as well as to provide lessons learned to refine this approach. For the implementation of the pilots, NIWS has evaluated the interest of possible actors to carry out the work, the approval of state entities and the local community, and the sustainability of the intervention.

The two pilot cases for IOARR application are:

1. Rehabilitation of approximately 8 km of amunas in Tupicocha, Lurín watershed. Investor and implementer: GORE Lima.
2. Rehabilitation of approximately 200 ha of Andean scrubland in the Machu Picchu Historic Sanctuary that were affected by forest fires. Investor: GORE Cusco. Developer and implementer: SERNANP.

This quarter, CONDESAN secured the commitment of GORE Lima and GORE Cusco to finance the IOARR pilots. Working with these actors and SERNANP, CONDESAN scoped the technical assistance to develop both IOARR pre-investment studies, which will be carried out through consultancies next quarter.

3.2.2 Develop and operationalize new mechanisms for channeling Natural Infrastructure funds (eg private sector, ProInversion) and coordination across sectors (eg trusts)

Private Sector Engagement

This quarter, NIWS continued our collaboration with Anglo American in Moquegua to accelerate and improve the quality of public and private investments in natural infrastructure in that region. NIWS prepared the TORs for Anglo American’s call for proposals for the implementation of the construction of nurseries and the installation of pilot plots on 20 hectares in Tumulaca. The call will occur next

quarter. These terms of reference were elaborated by NIWS using areas of intervention identified by HIRO, mapping of nurseries, the identification of suitable species, the design of plots, and the design of monitoring systems.

Additionally, towards the end of the quarter, conversations began with Anglo American for co-financing the pre-investment required to develop the Technical File of a USD 3.7 M PIP. The PIP's profile has already been declared viable by the Carumas District Municipality and AgroRural is interested in financing its execution. This opportunity will be evaluated in detail in Q4.

In Quilca-Chili, NIWS completed preliminary hydrological modeling of the upper part of the basin, which generates key information on potential hydrological benefits of natural infrastructure investment that are critical to the project proposal for Cerro Verde. In order to build a portfolio of projects, progress has been made to organize information from the Peruvian public investment system (Invierte.pe) on projects in the vicinity of the basin.

Reconstrucción con Cambios

This quarter, NIWS continued technical assistance to consulting firms developing Integrated Plans for investment by Reconstrucción con Cambios in priority coastal watersheds to reduce risks related to floods and landslides. The technical assistance was developed closely with MINAGRI's Subsectorial Program on Irrigation (PSI); personnel from this program and other national and regional public agencies responsible for supervising the development of the Integrated Plans also received training and technical assistance from NIWS this quarter. Building upon the development, application, and publication of HIRO-GRD (discussed in Section 2.2.1), NIWS support for investments by Reconstrucción con Cambios was carried out through the training of 130 project developers and evaluators, direct technical assistance to improve the quality of investments proposed, and quantification of the hydrological benefits of natural infrastructure investments proposed for incorporation in Integrated Plans.

The virtual course, Development Natural Infrastructure Investments for Disaster Risk Management, took place between April and June this quarter. A total of 176 project developers and supervisors, representing teams developing Integrated Plans in 17 watersheds, participated in the course, with 123 out of 130 participants successfully graduating. More information on the course can be found in Section 4.1.2.

Course instruction was accompanied by direct technical assistance provided by specialists on the NIWS team and through a NIWS-contracted consultancy executed by public investment specialists JS Consultores. This technical assistance helped to improve the quality of investments proposed, including cases that include natural infrastructure activities within gray infrastructure projects. At the end of the course, a total of 22 projects were identified and in development.

Additional technical assistance, beyond the scope of the course, has been provided to a number of teams developing a total of 13 of the 17 Integrated Plans, according to their stage of development (see Table 6). Technical assistance includes support identifying and justifying the location and types of natural

infrastructure interventions proposed using HIRO, improvements to project development, and the quantification of benefits using hydrological modelling carried out by NIWS technical specialists.

Table 6. Integrated Plans for the Control of Floods and Landslides under Reconstruccion Con Cambios receiving NIWS technical assistance, by phase of development

Watershed / Phase of Plan Development	Identification	Development	Evaluation
Matagente	✓	✓	✓
Mala	✓	✓	✓
Casma	✓	✓	✓
Huarmey	✓	✓	
Cañete	✓	✓	
Virú	✓	✓	
Zaña	✓	✓	
Tumbes	✓	✓	
Piura	✓	✓	
Huaura	✓		
Olmos	✓		
Chicama	✓		
Chancay	✓		

3.2.4 Design and facilitate implementation of financing mechanisms, governance platforms, and coordination bodies addressing key gaps

Cuenca ChiRiLuMa

This quarter, NIWS worked closely with SEDAPAL and relevant stakeholders in the ChiRiLuMa watershed to advance the development of a regional Good Governance Platform for SEDAPAL's MERESE program.

As reported in previous quarters, NIWS has been participating in the Natural Infrastructure and Water Conservation Working Group (GT INCA) of the Water Resources Council of the CHIRILU Watershed, which SEDAPAL has indicated will assume the functions of the Good Governance Platform (PBG) for their MERESE program. This quarter, the Executive Committee of the GT INCA met twice; as a result the group agreed on a 2020 Work Plan that focuses on coordinating and articulating interventions in CHIRILU, as well as three specific objectives: (i) institutionalizing the GT INCA, (ii) operationalizing the PBG and (iii) supporting the preparation of the CHIRILU Management Plan. During these meetings, SEDAPAL highlighted the important support it will receive from NIWS in operationalizing the Good Governance Platform.

NIWS and SEDAPAL will be holding work meetings in the following weeks to develop a roadmap and comply with the short-term activities requested: (i) The mapping of the actors and (ii) Systematization of information on investments in NI at CHIRILU.

In addition to the work with the GT INCA, this quarter NIWS worked with SEDAPAL to scope the development of a community relations strategy to support the development, management, monitoring and evaluation of SEDAPAL's portfolio of MERESE projects. As part of this effort, a consultancy was designed, which we expect to be carried out next quarter.

IR 3.3: Improvement of the evidence base of the hydrological and socioeconomic impacts of green infrastructure interventions

3.3.2 Document learning site and produce and ex ante hydro-economic analyses

This quarter, NIWS produced and consolidated analysis on the expected hydrological benefits of natural infrastructure interventions in learning sites and priority watersheds. At the project scale, NIWS carried out the evaluation of the PIPs with support from the NGOs and the consulting firms for SEDAPAL's portfolio (see 3.1.5). This evaluation was based on the application of the different tools developed by NIWS, such as CUBHIC, HIRO-MERESSE, the Effectiveness, Equity, and Sustainability Scale and the AFOLU Carbon Calculator. This activity has the additional purpose of fine-tuning the tools developed by NIWS. The complete results of the evaluations are expected next quarter.

Additionally, this quarter we used Esri's StoryMaps digital tool to narrate the vision, objectives, areas of work and actions promoted and developed by NIWS. Through maps, multimedia material, figures and graphics, a pilot proposal of StoryMaps was developed for the ChiRiLuMA Priority Basin and the Huamantanga Learning Site. Currently, the tool is being used to develop material for the Quilca-Chili and Tambo-Moquegua basins. The StoryMaps are under review and expected to be finalized and launched for at least these three priority watersheds by the end of the fiscal year.



Peruvian women, protagonists in water management but largely absent in decision-making, a gap that the NIWS project will help to fill. (Photography: Forest Trends)

Cross-Cutting Strategies and Project Administration

4.1: Monitoring, Evaluation and Learning

4.1.1 Monitoring Evaluation and Learning Plan

Project Information System

This quarter, Forest Trends continued to improve the Project Information System to respond to Project monitoring and evaluation needs. Specifically, the function of the information system for registering participants in NIWS events and trainings was improved to become much more efficient, and new functionalities designed to monitor advances in investment mobilization have become fully operational. Each investment supported by NIWS can now be tracked according to projected and actual advances in project development, and analyses across the portfolio can be automatically generated using a variety of filters (see Figure 8). NIWS specialists were trained in the new functions to support regular updating of information.

Figure 8. Screenshot of Project Information System window monitoring the mobilization of NIWS investments

Action	Numero	Proyecto	Monto de Inversión Dólares	Monto de Inversión Soles	Región	Retribuyente	Tipo de Retribuyente	Cuenca	Estado Inicial	Fecha Estado Inicial	Estado 2	Fecha Estado 2	Estado 3	Fecha Estado 3
VIEW	3	PIP Cuenca Saltral- Alto Bigote	US\$5,412,727.27	S/17,862,000.00	Plura	Autoridad para Reconstrucción con Cambios	la Reconstrucción con Cambios	Chira-Plura	Idea	10 de septiembre	Perfil o FTS en diseño (o con observaciones)	10/12/2019		
VIEW	4	Recuperación del Servicio Ecosistémico de Regulación Hídrica en 07 Áreas de Conservación en las Subcuencas Quiroz y Macará, de los Distritos de Ayabaca, Palmás y Pacapampa, Provincia de Ayabaca, Departamento de Piura	US\$3,066,830.35	S/10,120,540.17	Piura	GORE Piura; EPS Grau	Gobiernos Regionales y Provinciales	Chira-Plura	Idea	2 de octubre	Perfil o FTS en diseño (o con observaciones)	10/12/2019	Perfil o FTS Elaborado	02/03/2020
VIEW	5	Recuperación del servicio ecosistémico de regulación hídrica de la margen derecha de la microcuenca Puzumaica, del distrito de Canchaque, provincia de	US\$2,164,275.81	S/7,142,110.18	Piura	GORE Piura	Gobiernos Regionales	Chira-Plura	Perfil o FTS declarado viable (aprobado)	2 de septiembre	ET en diseño (o con observaciones)	04/11/2019	ET Elaborado	30/12/2019

Studies on information used by project beneficiaries and the perceptions of natural infrastructure

This quarter, Forest Trends designed two studies to evaluate the impact of NIWS' efforts in two key areas:

1. **The use of information disseminated by NIWS.** The objective of this study is to identify, describe and analyze the uses of the information by user, source of information (NIWS or third parties), and how the information was shared.
2. **Perceptions of natural infrastructure in the media.** The objective of this study is to identify the presence of natural infrastructure and water security topics in the news, as well as describe and analyze trends and the use of key terms. The study will include written articles in the Peruvian press, as well as posts on their social networks during 2019 and 2020.

These studies will begin in the following quarter and should be completed before the end of the fiscal year.

4.1.2 Capacity-Building Strategy and Action Plan

NIWS' capacity-building strategy continued in full force this quarter, with a focus on strengthening capacities to develop effective investments in natural infrastructure that meet all requirements of Peru's public investment system, Invierte.pe. Courses were delivered effectively through the new NIWS Virtual Classroom (<https://aulainfraestructuranatural.org>), which was implemented in April as one of the Project's key adaptive management measures in response to limited in-person training due to COVID-19 social distancing measures.

The first course to utilize the NIWS Virtual Classroom concluded in June, having trained 130 project developers and supervisors on public investments in natural infrastructure in the framework of Reconstrucción con Cambios. Additionally, this quarter NIWS kicked off a new course with the National School of Public Administration (ENAP) on public investment in natural infrastructure and advanced development of three new courses. The following sections detail progress on each of these.

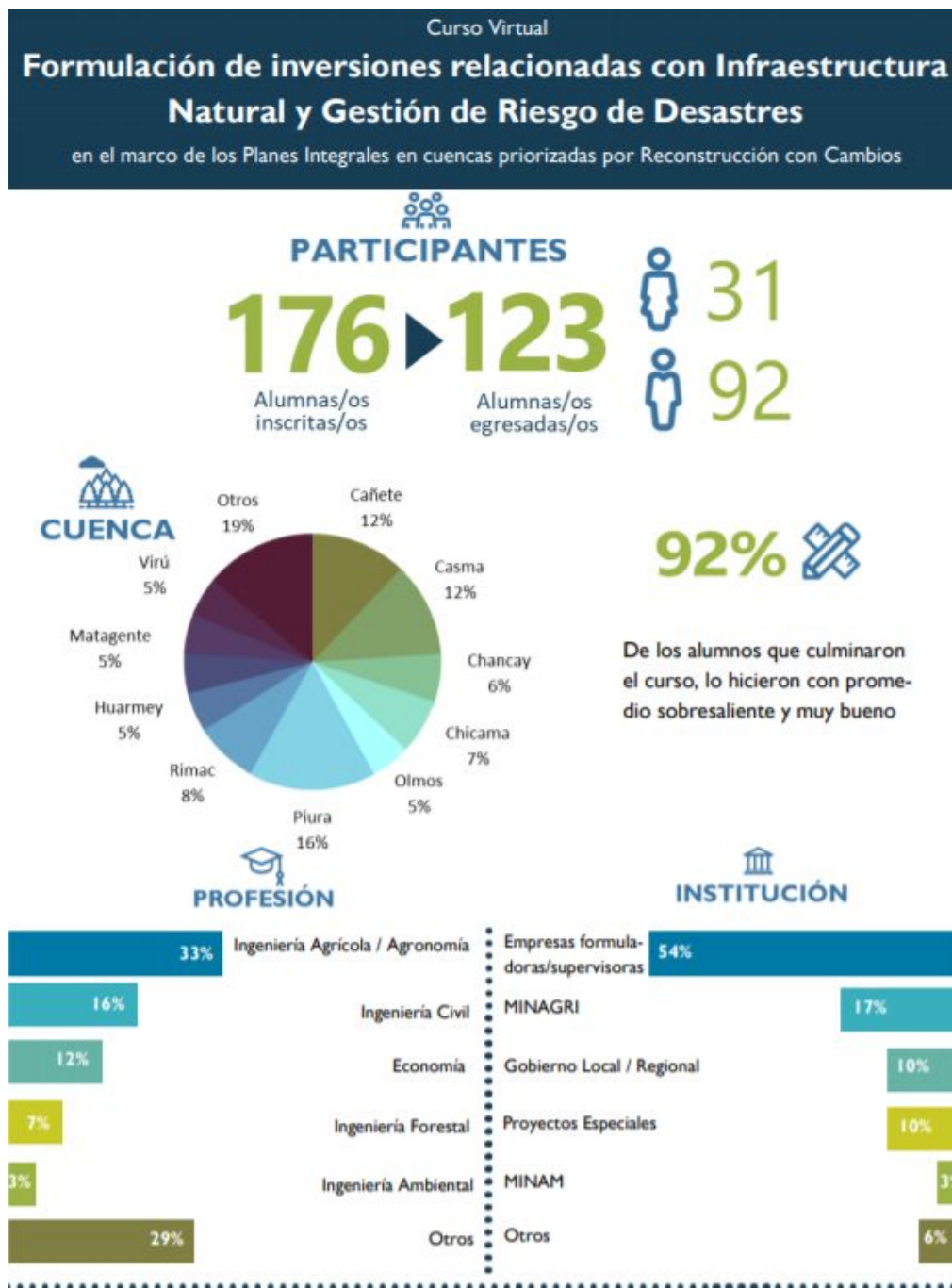
Virtual Course: Formulating Investments in Natural Infrastructure for Disaster Risk Management

This quarter, NIWS trained 130 project developers and supervisors working directly to prepare Integrated Plans that will direct investment under Reconstrucción con Cambios in 17 vulnerable watersheds. The training took place through the online course, Development Natural Infrastructure Investments for Disaster Risk Management, which was developed with MINAGRI in its role as supervisor for a number of these plans. In March, Forest Trends transitioned the training online in lieu of a series of in-person workshops that had been planned in Lima and Piura, in response to COVID-19 related restrictions.

The virtual course took place between April 13th and May 30th, 2020. Out of the 176 total participants, 130 completed all modules (74%) and 123 passed the course (70%). 29 of the graduates were women (24%) and 94 were men (76%). Nearly two-thirds of participants were from consulting firms hired to develop the Integrated Plans; one-third were from supervisory entities (MINAGRI, MINAM, PCM,

Reconstrucción con Cambios, regional governments, and local governments). Eighty percent of participants evaluated the course as either satisfactory or very satisfactory. The most valued aspects were the methodology and the teachers. See Figure 9.

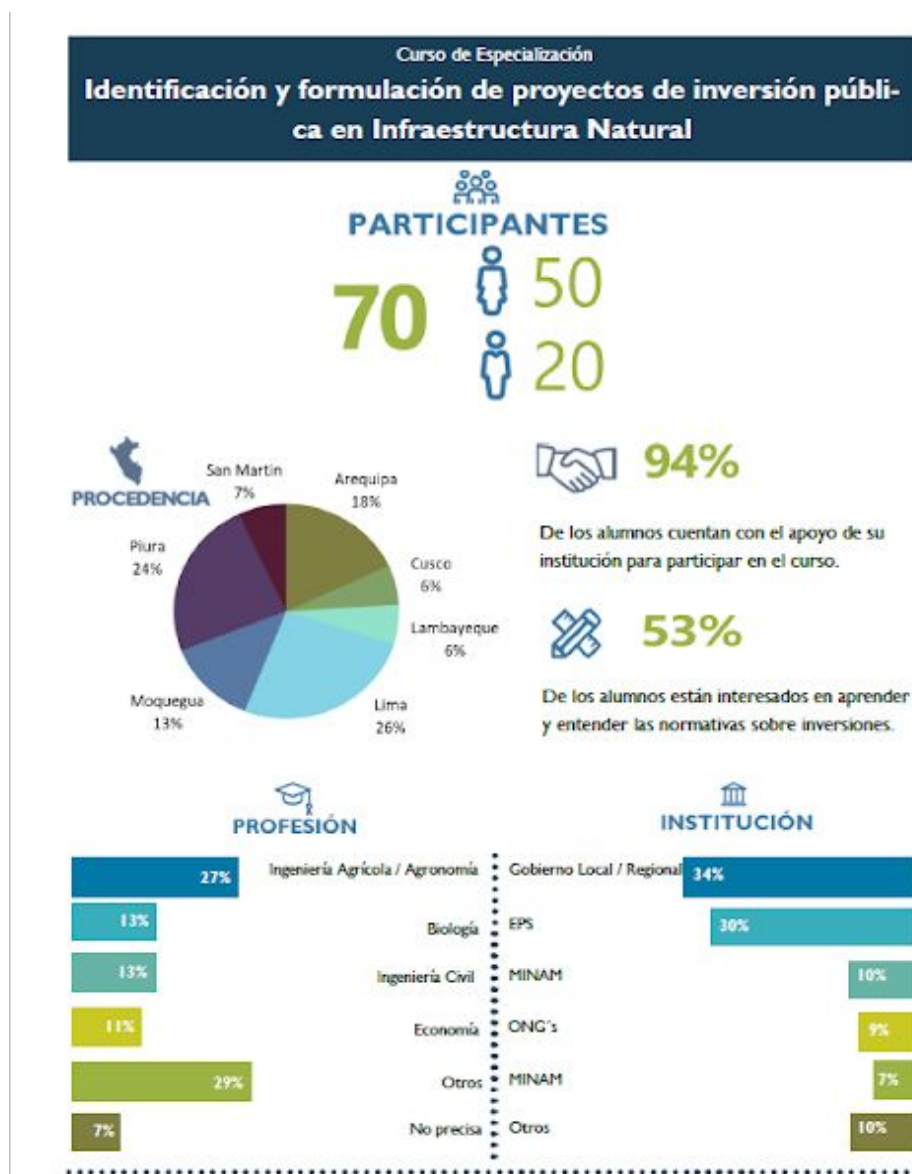
Figure 9. Summary of results of the Virtual Course, *Formulating Investments in Natural Infrastructure for Disaster Risk Management*



Virtual Course: Public Investments in Natural Infrastructure for Hydrological Regulation (ENAP)

In May, Forest Trends kicked off a new course in collaboration with the National School of Public Administration (ENAP), to strengthen the capacity of Peruvian civil servants to develop and evaluate investments in natural infrastructure. The course will run through September 2020. Its modules cover the identification, development, and evaluation of public investment projects in natural infrastructure in the framework of Invierte.pe.

Figure 10. Summary of participants of Virtual Course, *Public Investments in Natural Infrastructure for Hydrological Regulation Course*, developed with ENAP



This course was designed to develop strategic investments as applied case studies while strengthening capacities of public officials. Thus, the participants enrolled in the course were intentionally identified by NIWS investments specialists and enter the course in teams with a project investment idea. In addition to independent study within each module, the participants work in collaborative learning teams to prepare their public investment project, using the Simplified Technical File format. Teams are accompanied with technical assistance to support effective project development and applied learning.

A total of 70 participants from 7 regions (Arequipa, Cusco, Lambayeque, Lima, Moquegua, Piura and San Martín) are enrolled in the course. Of the total number of participants, 50 are men and 20 are professional women from various disciplines such as agricultural, civil, forestry and environmental engineering, geography, biology, economics, law, and architecture. Participants represent 5 regional governments, 5 local governments, 5 water utilities, ANA, MINAM, SUNASS, SERNANP, SERFOR, the Alto Mayo Special Project, and several NGOs. Participants have 13 project ideas for 13 entities in 7 departments of the country. See Figure 10.

For this course, Forest Trends has contracted JS Consultores and UTEC to execute the technical instruction, operational course coordination, and technical assistance, with the accompaniment of NIWS technical specialists. Additionally, UTEC offers official certification to participants, which is a great incentive to complete the course and thereby improve the professional resume of the participants.

Courses in development

This quarter NIWS also advanced the development of three new courses, as summarized here:

- **Virtual Course: Introduction to Natural Infrastructure and Disaster Risk Management (AgroRural)** – This course will support personnel in AgroRural’s regional offices to incorporate natural infrastructure interventions in their planning, with the aim of including their incorporation in the agency’s regular activities. Course content includes i) Natural Infrastructure (NI) and ecosystem services in the agricultural sector and their relationship to climate change, ii) Disaster risk management, iii) Quantification of benefits of NI, and iv) NI projects and financing sources. The course includes topics of governance and a gender perspective throughout the modules. This quarter, Forest Trends worked with AgroRural to design the course and to identify potential participants. The course is planned to run from July to October 2020 with an estimated 90 participants.
- **Virtual Course: Journalism and Natural Infrastructure** – SPDA and the Mohme Foundation are developing this course, which will now be held entirely online as well. The course is scheduled to start with 50 journalists in August 2020. The training will result in the production of podcasts, narrative journalism and digital journalism investigations related to ecosystems, ecosystem services and investments in these topics.
- **Massive Open Online Course (MOOC): Sustainable Water Management (SUNASS and ENAP)** – Forest Trends is supporting the design of this course, led by SUNASS and ENAP, with a rapid assessment of training needs among public servants from three levels of government (local, regional, and national). It is expected to start in October 2020.

4.2 Gender Strategy

In addition to reporting on activities listed under the heading 4.2 in our Annual Work Plan, this section summarizes gender-related activities across the Project in this quarter.

This quarter, Forest Trends presented the revised NIWS Gender Strategy and Action Plan to USAID and Canada on May 7th. Following the strategic direction laid out in this plan, NIWS launched the Women in Natural Infrastructure Leadership Program, advanced the institutional diagnostics with teams supporting the development of Gender Action Plans in ANA and SUNASS, and continued iterative development and application of guidelines for incorporating a gender approach in public investment projects for natural infrastructure. While all these activities were interrupted, to some degree, by the COVID-19 pandemic, timely adjustments and continued commitment on the part of NIWS partners allowed activities to proceed. The following section details these activities.

Women’s Leadership Program

This quarter, NIWS kicked off the Women’s Leadership Program for Water Management, beginning a rich series of capacity-building and exchange among its first class of 88 women leaders active in water and natural resources management, in 12 regions across the country.

Leadership Program participants include women leaders from regional and local governments, water management agencies, civil society, and academia (see Table 7 and Figure 11). NIWS launched the call for participants in May, in which we received 347 applications, including 128 applications from departments not specifically targeted and other countries such as Ecuador and Costa Rica—highlighting the demand for this type of program.

The Program’s launch was publicized through 13 posts for social networks. A press campaign promoted the Program through 12 posts in the national media with a total reach of 3,153,496 people (more details in Annex 6).

Table 7. Women’s Leadership Program for Water Management participants by name, institution, position and target group

Officials of State Institutions					
	Last Names	First Names	Region	Institution	Position
1	Barros Salas	Cintha	Lima	SUNASS	Analista en Gestión del Riesgo de Desastres
2	Bautista Palacios	Marisol	Piura	Administración Local del Agua Medio y Bajo Piura	Especialista en Sistema de Información Geográfica
3	Berrú Chávez	Teotista Doménika	San Martín	Comité de Gestión de Cumbaza	Especialista en Gestión Territorial
4	Caballero Marchan	Kenny Carol	Arequipa	SERNANP	Especialista en recursos naturales
5	Calle Marchena	Yenny Roxany	Piura	M.D. San Juan Bigote	Gerente
6	Calvo Vargas	Janeth Coral	Lima	MINAM	Especialista de Conservación de Ecosistemas
7	Campos García	Analí	Piura	EPS GRAU S.A.	Jefe de Departamento (e)
8	Cárdenas Campana	Jessenia	Cusco	CRHC Vilcanota-Urubamba	Especialista en Sistemas de Información
9	Cárdenas Sarmiento	Emma Francy	Lima	ANA	Coordinadora

10	Carrillo Moscoso	Luz Aydé	Lima	ANA	Especialista
11	Chariarse Valencia	Vielka	Cusco	SUNASS	Especialista
12	Cornejo Sánchez	Yesenia Esperanza	Arequipa	SUNASS	Especialista en atención
13	Díaz Campos	Marcia Estefany	Lima	SEDAPAL	Consultora
14	Gallo Meléndez	Luz Mariela	Piura	CENEPRED	Coordinadora
15	García Meneses	Raquel María	Piura	SUNASS	Gestor Social ODS Piura
16	Jiménez Milon	Rosa María	Arequipa	EPS SEDAPAR	Jefe de Departamento
17	Justo Minaya	Olga	Cusco	SUNASS	Especialista en supervisión II
18	Lisboa Barrientos	Lorena Alicia	Piura	CHRC Chira-Piura	Especialista en Comunicación
19	Martínez Quispe	Yessica	Lima	ANA	Especialista del Sistema Nacional de Información de Recursos Hídricos
20	Paz Alcázar	Ana Lucía	Arequipa	AUTODEMA-PEMS	Gerente
21	Peña Niño	Mercede Angelina	Piura	MVCS	Supervisora Social
22	Quispe Chancolla	Marcela	Arequipa	Anexo de Vincocaya	Teniente Gobernadora
23	Quispe Mirand	María Angélica	Lima	MINEM	Especialista
24	Rosi Mori	Priscilla Nathaly	Lima	GORE Lima	Directora de Gestión de Recursos Naturales y Asuntos Ambientales
25	Tineo Herhuay	Melissa	Lima	SENAMHI	Analista

Local Authorities

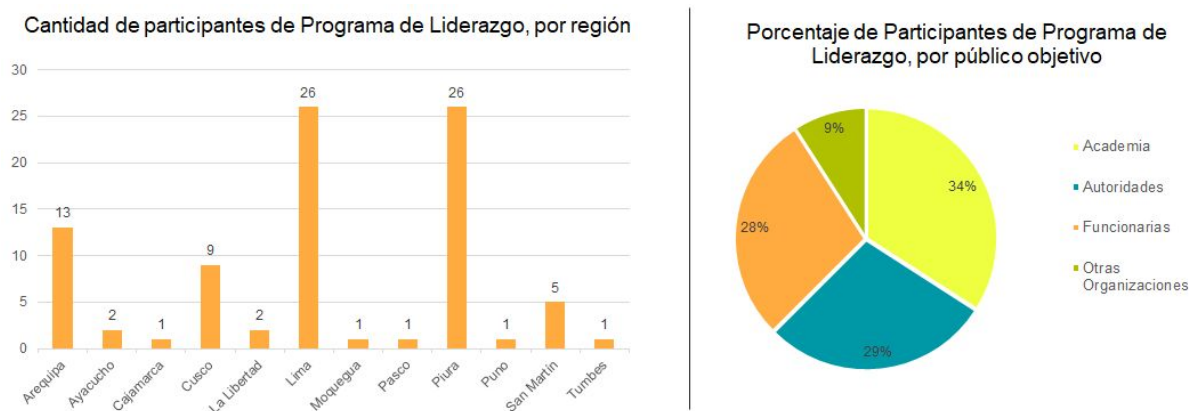
	Last Names	First Names	Region	Institution	Position
26	Benites Martell	Maura Esther	Piura	M.P. Paita	Regidora
27	Campos Mendoza	Carmen Rosa	Piura	M.P. Morropón	Regidora
28	Collana de Palacios	Teodora	Arequipa	JASS Pueblo Libre	Cargo Ad Honorem
29	Del Aguila Beteta	Liz	San Martín	M. P. San Martín	Regidora
30	Facundo Aguilar	Albania Margarita	Piura	M.D. de Castilla	Regidora
31	Farfán Huamán	Melina	Cusco	M.P. Cusco	Regidora
32	Flores De castañeda	Teodora	Piura	M.P. Paita	Regidora
33	Flores Espinoza	Ingrid María	Piura	M.D. Vichayal	Regidora
34	Ginocchio	Alvita	Piura	M.D. de la Huaca	Regidora
35	Granda Anastacio	María Verónica	Piura	M.D. de la Arena	Regidora
36	Ipanaqué Rivas	Sary Rivas	Piura	M.D. Vichayal	Regidora
37	Juarez Merino	Rosmary	Piura	M.D. Suyo	Regidora
38	Lozada Floriano	Heidi Gabriela	Piura	M.P. Piura	Regidora
39	Ludeña Culquicondor	Santos Balvina	Piura	M.D. Suyo	Regidora
40	Montero Zapata	Paulina Nataly	Piura	M.D. Miguel Checa	Regidora
41	Oriundo Salazar	Karin Inés	Piura	M.D. de Castilla	Regidora
42	Poma Apaza	Miriam Elizabeth	Moquegua	M.P. Mariscal Nieto	Regidora
43	Rojas García	Melania	Piura	M.D. Amotape	Alcaldesa
44	Saldarriaga Prado	Hisella Lizbeth	Piura	M.D. El Arenal	Regidora
45	Seminario Chavez	Diana Gisela	Piura	M.D. Colán	Regidora
46	Taco Cueva	Natividad	Arequipa	Comunidad Campesina de Orcopampa	Presidenta
47	Valencia Guerrero	Flor Midagny	Piura	M.D. Montero	Regidora
48	Vilchez Ipanaqué	María Roxana	Piura	M.D. Loma Negra	Regidora
49	Zelada Quiroz	Tania	La Libertad	M.D. Pacanga	Regidora
50	Portugal Villanueva	Julissa Mónica	Arequipa	ANA	Coordinadora

Academia

	Last Names	First Names	Region	Institution	Position
51	Alegre Palomino	Cynthia	Cusco	UNSACC	Investigadora
52	Almeida Goshi	Cynthia Hisako	Lima	UNALM	Estudiante
53	Calvo Marcilla	Rubí Carol	Lima	UNALM	Investigadora
54	Choquehuanca Paredes	Lizbeth Rocío	Puno	UNAP	Investigadora
55	Chunga Ramírez	Ivonne	Piura	UNP	Investigadora
56	Chuqui Vega	Gabriela	San Martín	UNSAM	Investigadora
57	Coaguila Agurto	Susán Leía	Lima	UNALM	Investigadora
58	Condezo Aguilar	Ana Gabriela	Pasco	UNFSC	Investigadora
59	Contreras Segá	Susana Janeth	Lima	UNALM	Investigadora
60	Díaz Floriano	Rosario	Lima	UNFV	Estudiante

61	Flores Pintado	Katherine	Tumbes	UNT	Estudiante
62	Flores Sandoval	Briggeth Estephany	Lima	SENACE	Investigadora
63	García Arias	Carol Paola	Lima	UNMSM	Investigadora
64	Gonzales Aguilar	Ida Maira	Lima	PUCP	Investigadora
65	Guzman Rodríguez	Nataly	Arequipa	UNSA	Investigadora
66	Hilario Coaguila	Vanessa Rosa	Arequipa	UNSA	Investigadora
67	Huamán Butrón	Noemi Andrea	Lima	UNFV	Estudiante
68	Laucata Coaquira	Estrella Cindy	Arequipa	UNSA	Investigadora
69	Llique Gallardo	Rosa Liseth	Lima	UCV	Investigadora
70	Macutela Avila	Nataly	Lima	PUCP	Investigadora
71	Miranda Cabrera	Marycielo Lisbeth	Lima	PUCP	Investigadora
72	Mitsue Huatuco	Miranda	Lima	UNI	Investigadora
73	Pilco Levita	Yolanda	Cusco	UNSACC	Investigadora
74	Quispe Giron	Gloria	Ayacucho	UNSCH	Investigadora
75	Quispe Pilco	Ruth	Lima	UNMSM	Investigadora
76	Ríos Quiliche	Alondra Orquidea	Cajamarca	UNC	Investigadora
77	Sotelo Tornero	Marisela	Lima	PUCP	Investigadora
78	Taboada Hermoza	Rossi	Lima	UNMSM	Investigadora
79	Tirado Lagos	Sayo Milagros	Ayacucho	UNSCH	Investigadora
80	Vargas Orcotorio	Alexandra	Cusco	UNSACC	Estudiante
Other Organizations					
	Last Names	First Names	Region	Institution	Position
81	Castro Molina	Fiorela Alejandra	Arequipa	Asociación Civil Labor	Coordinadora
82	Del Castillo Morey	Martha	San Martín	CEDISA	Coordinadora de Programa
83	Escárate Merino	Ruth Elizabeth	Lima	UNESCO	Consultora
84	Mescoco Pumayalli	Jennifer	Cusco	CIFOR	Investigadora
85	Poma Bonifaz	Delmy Doris	Arequipa	DESCOSUR	Presidenta
86	Saire Sallo	Shirley	Cusco	CBC	Consultora
87	Toribio Roncal	Jhennifer Amyli	La Libertad	CEDEPAS Norte	Asesora técnica
88	Zumaeta Soplin	Anselma	San Martín	TYPASA S.A.	Especialista

Figure 11. Women's Leadership Program for Water Management participants by region and target group



Training and exchanges under the Leadership Program began in June and will continue through August 2020 under the coordination of the team contracted by Forest Trends composed of CEDEPAS Norte, Desco, and PUCP, with the support and accompaniment of NIWS specialists. Through June and July, the Program trained participants in technical content on integrated watershed management, water resources management policy, gender approach in water management, and gender equality policy. Beginning in July,

Program content will transition to focus on leadership and advocacy skills. Two keynote seminars are also scheduled, for July and August, with international experts in water and natural infrastructure management. In August, participants will present on personal projects they are developing related to water and natural infrastructure management.

As reported in our update to the FY2020 Work Plan submitted in April, the launch of the Leadership Program was delayed two months due to COVID-19, as the emergency required NIWS to redesign the program. As a result of this redesign, the Leadership Program was converted to virtual format. While this format allows the Program to continue in spite of social distancing requirements, it prevents NIWS from effectively engaging local women leaders -- one of the priority audiences in the leadership program -- since it is often very difficult or impossible for these women to consistently access programming online. Therefore, NIWS plans to hold a program specifically designed for local leaders once restrictions are lifted to allow for this engagement during the next fiscal year.

Mainstreaming Gender in Water Sector Institutions

Building on the high-level ratification of commitments to mainstream gender in ANA and SUNASS in February, this quarter NIWS advanced institutional diagnostics to serve as baselines for Gender Action Plans. As reported in Q2, this analysis is being led by specialized consultant teams assigned to each institution, working closely with specialists from NIWS and MIMP as well as with task forces set up in each institution. Analysis this quarter was primarily based on desk review of documents such as the Multiannual Sector Strategic Plan (PESEM), Institutional Strategic Plan (PEI), Operational Plan (POI), Personnel Development Plan, and budgets, as well as other policy and strategy documents. Additionally, teams carried out interviews with officials in SUNASS and ANA in May and June. While coordination with counterparts, in particular for organizing interviews and focus groups, was interrupted due to the pandemic, activities continued and the diagnostics are expected to be completed for both institutions in July.

Incorporating a gender approach in Public Investment Projects

This quarter NIWS consolidated draft guidelines for incorporating gender considerations in public investment projects for natural infrastructure. These guidelines are designed to support project developers and evaluators to identify and consider gender gaps from the first stages of natural infrastructure project design, as well as to evaluate the impacts of project interventions on women and men with a view to reducing gender gaps wherever possible. The guidelines also include recommendations for how actions can be designed to generate conditions of equality between women and men. The guidelines are tailored to the various stages of a project (preparation of the Technical File, Profile, or Datasheet).

These guidelines are being developed in an iterative process as they are applied to public investment projects receiving NIWS support and NIWS gender specialists provide technical assistance to project developers to support the incorporation of the gender approach during project development. Gender considerations have also been included in course content for the Virtual Course on Investments in Natural Infrastructure developed with ENAP (see Section 4.1). In addition to the technical assistance,

This will further improve project designers' technical capacities to incorporate a gender perspective in natural infrastructure investment projects. Recommendations were made to 20 projects. They will be incorporated as projects are developed during the corresponding investment cycle.

NIWS has begun to evaluate mechanisms by which these guidelines could be adopted formally by government agencies, efforts which we expect to develop further in our FY2020 work plan.

Highlighting challenges for gender equity in the context of COVID-19

In the context of the pandemic, NIWS participated in two important online seminars to provide an expert perspective on gender and natural infrastructure. The first was a discussion called "Response to Covid-19: Women, Girls and Diversity", which was organized by Amnesty International Peru on April 19. The second meeting, organized by the Chaparra Chincha Water Management Authority, called "Challenges of water resources management during a pandemic: The role of Women," was held on June 19. Both seminars were broadcast on Facebook Live.

Programmatic efforts and information produced by NIWS were also recognized by national leaders in key virtual fora held during this period. During a webinar on #RuralWomen (#MujeresDelCampo), organized by CARE Peru in June, Minister of Women and Vulnerable Populations Gloria Montenegro Figueroa highlighted the importance of women farmers for the development of the country, mentioning the gender gaps in family farming and making reference to Forest Trends' work in the Women in Natural Infrastructure Leadership Program and mainstreaming gender within ANA and SUNASS. At the same meeting, Vice Minister Paula Rosa Carrión Tello cited NIWS' study on gender gaps in the water sector, pointing out that while in 2019 the formal land ownership titling of rural women improved, there is still a gender gap within water user boards, where the participation of women is at 32%.

4.3 Planning, Reporting & Environmental Compliance

Approval of Environmental Monitoring and Management Plan (EMMP)

The EMMP was approved in June of this year. After identifying activities that could entail environmental risk, NIWS had to request the modification of the original grant contract and subsequently revise the additional EMMP to include additional actions.

The EMMP was revised to include the installation of flowmeters in certain streambeds to measure streamflow for hydrological monitoring. After COVID-19 restrictions are lifted, the flowmeters will be installed in small concrete boxes specifically designed to minimize risk of any environmental impacts.

Pause & Reflect and Review of Priority Clients

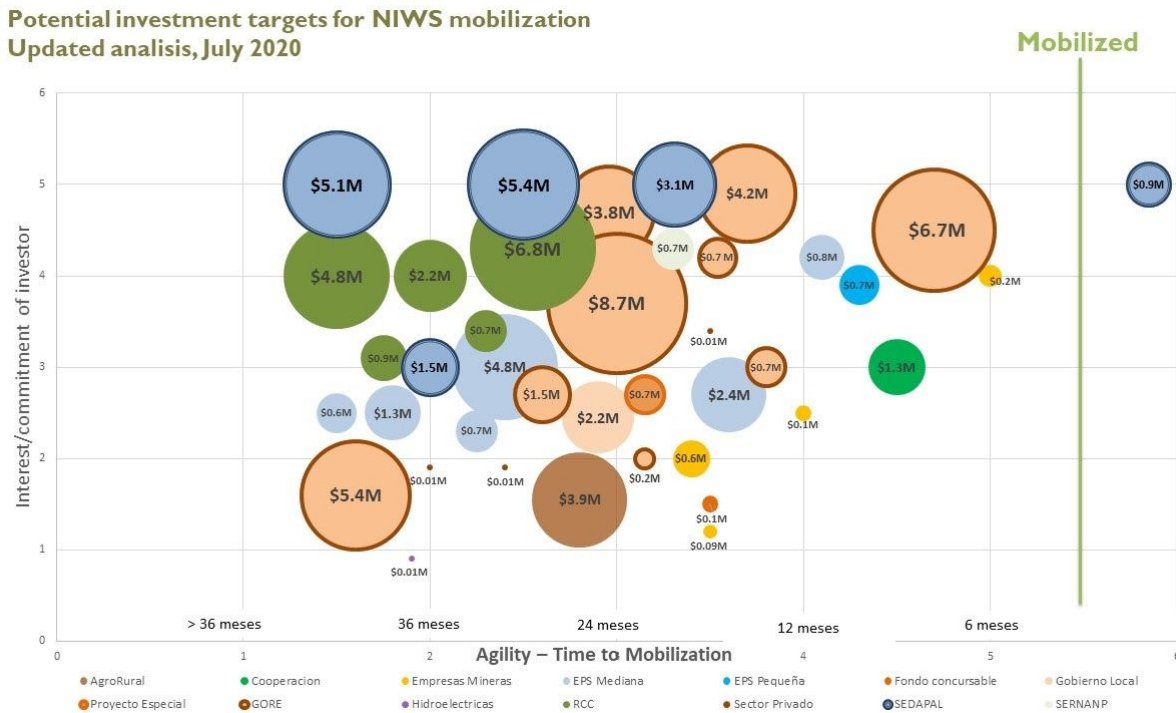
This quarter, Forest Trends co-designed our annual Pause & Reflect workshop with USAID and the facilitation team from Measuring Impact 2. The workshop was held virtually July 13-17, 2020. Forest Trends and our partners took the opportunity to take stock of advances to date and to review our

targets and strategy in particular around the critical goal of mobilizing investment. This review focused on an update to the analysis that informed the identification of our three priority clients for FY2020 (SEDAPAL, Reconstrucción con Cambios, and mining companies).

To carry out this review, and as part of the adaptive management of the Project, we updated our assessment of the current landscape of potential sources of finance for natural infrastructure, focusing on specific investments that could be mobilized within the remainder of the Project. Figure 12 shows this updated analysis, along with three key criteria that contribute to our analysis:

1. Estimated amount of investment feasible to mobilize, based on the client's willingness to invest in the natural infrastructure and the size of the proposed investments (represented by the size of the bubbles in Figure 12).
2. Agility/time to mobilize, depending on the institutional context and the available or potential implementation mechanisms for each client (represented by the X axis in Figure 12).
3. Client interest or commitment to invest in natural infrastructure and to work with our team to overcome bottlenecks along the way. Key evidence of high commitment includes formal budgetary programming of the investment (represented on the Y-axis in Figure 12).

Figure 12. Analysis of possible specific investments to be mobilized for INSH, prepared by Forest Trends and CONDESAN in July 2020, presented during the Pause and Reflect 2020 workshop.



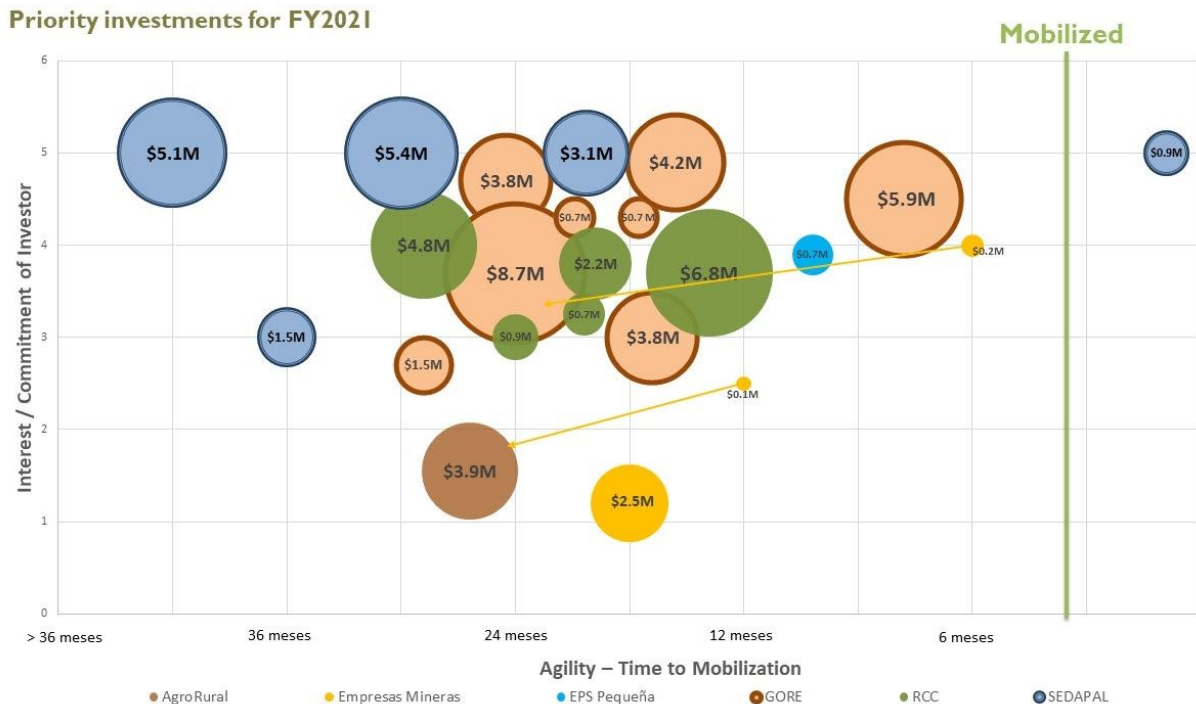
The updated analysis of potential investments to be mobilized shows that Regional Governments represent an important source of potential investments to be mobilized. Of the \$74.9M of investments identified as potential to be mobilized in the life of the Project (<36 months), the Regional Governments of Moquegua, Lima, Piura, and Arequipa represent 34%. The 4 GOREs are followed by Reconstrucción

con Cambios and SEDAPAL, whose identified potential investments are \$15.6 M and \$11 M, respectively. Together, these 3 sources represent 70% of the investments identified as possible to be mobilized during the life of the Project.

An important and evident lesson learned in the analysis is that mining companies, and the private sector more broadly, do not represent as important a source of viable investment in terms of magnitude as we bet in the FY2020 planning; potential investments to mobilize from this sector is estimated at \$3.4M. However, they remain important allies in accelerating and improving the quality of public investments. For example, the Tumilaca pilot to be financed by Anglo American in Moquegua should generate important information to influence the design of the GORE Moquegua PIP (\$8.7M); similarly, Anglo American is willing to finance an important part of the pre-investment of a \$3.9M investment by AgroRural in Carumas, Moquegua.

Based on this analysis, our assessment is that efforts to mobilize investments in FY2021 should focus on the Regional Governments of Moquegua, Lima, Piura, and Arequipa; Reconstrucción con Cambios; SEDAPAL; and the private sector, with a focus on leveraging private and public efforts ("blended finance"). This priorities-focused view is shown in Figure 13, below, and will inform our FY2021 work planning, which will begin next quarter.

Figure 13. Focus on Priority Investments for FY2021



The prioritized clients are the Regional Governments, Reconstrucción con Cambios, SEDAPAL, and the private sector under a "blended finance" approach.

Adaptive Management

Work Plan modifications

The COVID19 crisis has certainly impacted NIWS activities, in particular as it has the effect of delaying key meetings with decision-makers and stakeholders and redirecting attention, in the short term, of government counterparts with whom we work closely to achieve shared objectives.

However, we are also clear that the crisis has the potential to shift priorities in society and to stimulate a renewed and strengthened commitment to investing in solutions that will increase the resilience of our society and systems to threats like the coronavirus. Water security is an indispensable component of public health, and well-managed natural infrastructure is its foundation. We believe that if we can focus on delivering the proposals, tools, and capacities that were already underway before the COVID-19 crisis, these positive solutions will land opportunely, as the government looks for ways to stimulate the economy and build resilience coming out of the crisis.

Considering this situation, in April, NIWS delivered to USAID the document Adaptive Management Under COVID-19, describing how to focus efforts most productively in the coming months so as to be able to deliver on those objectives when regular activities are permitted to resume again.

The main adjustment to NIWS FY2020 Work Plan is two cancelled activities:

- The most important impact relates to international conferences. NIWS will not participate in the Stockholm World Water Week conference, which in fact has been entirely cancelled for this year. In general, NIWS will not support travel to any international conferences for the remainder of the fiscal year.
- NIWS has postponed the State of the Science on Natural Infrastructure Forum until calendar year 2021, as it would have been impossible to hold such an event under current restrictions or to effectively hold it virtually.

Other minor changes are related to delayed or extended activities and modifications in the methodology, from face to face to online format.

Field trip and office reopening protocol

NIWS developed a protocol to prevent infectious diseases, with emphasis on COVID-19, on the staff of the Natural Infrastructure for Water Security Project and on the people with whom we interact on national trips during the execution of planned activities. This protocol is based on official health information reported by WHO and the Peruvian Ministry of Health, and includes a checklist to verify the accomplishment of the mandatory considerations. In addition, the Project is preparing the protocol for reopening the office, which will come into force when the government allows it. The protocol is also based on official information and extreme measures to preserve the health of the staff.

MONITORING, EVALUATION AND LEARNING

In the Annexes to this report, Table 2 “Tracking Table” reports the progress on three of the Project’s indicators (it is worth noting that, for information purposes, we include indicator updates that are usually reported only once a year). Table 3 details the training events that were held during the quarter, Table 4 and 5 detail the technical and communication products that have been developed by the project; and the Table 6 shows the appearance in news media related to the intervention of the project. The Annex 7 shows an analysis of participation in the training events and webinars organized by the project, and finally, Annex 8 details the specifications of the courses that have been organized.

ANNEXES

- 1. NIWS Activity Description and Implementation**
- 2. Tracking Table**
- 3. Training events**
- 4. Technical products**
- 5. Communicational products**
- 6. Media reports associated with NIWS activities and outreach**

Annex I: NIWS Activity Description and Implementation

Activity code	Activity name	Activity type	Location (district/ province/ region)	Scope (national/ regional/ basin/ learning site)	Gender (Yes/No)	Estimated completion date (Qtr/FY)	% Complete (FY)				Status	Reasons for delayed or cancelled activities
							Q1	Q2	Q3	Q4		
I.1.1.3	Implement Communications Plan	Dissemination products	Lima	National	Yes	Q4 FY2020	20%	40%	75%	---	On-Track	
I.1.1.4	Training and site visits for journalists	Training	TBD	National	No	Q3 FY2020	0%	15%	25%	---	Delayed on track	This activity was reprogrammed for Q4 due to COVID
I.1.1.6	Implement training for communications professionals in priority watersheds, with a focus on EPS	Training	---	National	No	Q4 FY2020	0%	0%	0%	---	Not yet initiated	
I.1.1.7	Provide support for journalism on natural infrastructure through the Journalist Fund	Technical Assistance	---	National	No	Q4 FY2020	25%	30%	30%	---	On-Track	
I.1.1.8	Implement communications plans in priority watersheds	Technical Assistance	---	Regional basin	No	Q4 FY2020	15%	40%	60%	---	On-Track	
I.1.1.9	Develop and implement communications strategy for SEDAPAL staff, board and ratepayers on the importance of mobilizing MRSE funds	Technical Assistance	ChiRiLuMa	Regional basin	No	Q2 FY2020	10%	10%	20%	---	Delayed	Change of communications team in SEDAPAL
I.1.1.2	Produce and disseminate audience-appropriate products for reaching dozens of communities in priority areas for Sembramos Agua (SEDAPAL MRSE)	Dissemination products	ChiRiLuMa	Regional basin	No	Q4 FY2020	15%	40%	55%	---	On-Track	
I.1.1.3.3	Implement communications plan in learning sites	Technical Assistance	Prioritized sites	Learning site	Yes	Q4 FY2020	15%	35%	55%	---	On-Track	
I.1.1.4.4	National Congress on Natural Infrastructure	Political engagement	Lima	National	No	Q1 FY2020	100%	---	---	---	Completed	
I.1.1.4.5	Strengthen Peruvian champions for natural infrastructure by disseminating advances at key international Fora (FIAR COP25, World Water Week)	Political engagement	TBD	National	No	Q4 FY2020	0%	0%	---	---	Canceled	Was canceled due to the spread of COVID
I.1.1.5.1	Develop and implement coordinated communications campaign for Water Week (March) with Advisory Board partners	Dissemination products	TBD	National	Yes	Q2 FY2020	0%	25%	---	---	Canceled	Coordination of joint work began, but was canceled due to the spread of COVID

1.1.5.2	Develop products to communicate benefits of natural infrastructure to priority audiences (targeted briefs, web products)	Dissemination products	Lima	National	Yes	Q4 FY2020	5%	40%	80%	---	On-Track	
1.1.5.3	Develop and disseminate targeted products on NIWS advances and insights for international stakeholders	Dissemination products	Lima	International	Yes	Q4 FY2020	0%	0%	0%	---	Not yet initiated	
1.1.5.4	Strengthen Reconstrucción con Cambios understanding of the value of natural infrastructure for disaster risk management	Technical assistance	Lima	National	No	Q3 FY2020	20%	40%	50%	---	Delayed on track	
1.2.1.3	Continued facilitation of the Advisory Board and its Technical Platform	Political engagement	Lima	National	No	Q4 FY2020	20%	40%	60%	---	On-Track	
1.2.2.3	Prepare, launch and disseminate State of Natural Infrastructure report	Political engagement	Lima	National	Yes	Q1 FY2020	70%	80%	90%	---	Delayed	The analysis has been completed; final publication was delayed in the final editing
1.2.3.3	Develop Common Vision and Roadmap with Advisory Board	Technical Assistance	Lima	National	No	Q3 FY2020	20%	40%	70%	---	Delayed On-Track	In the process of adaptive management to the current context, it generated a delay.
1.3.2.2	Support incorporation of performance-based green infrastructure into the National Adaptation Plan	Technical Assistance	Lima	National	No	Q2 FY2020	0%	0%	25%	---	Delayed	The proceedings were initiated in Q3 by the authority
1.3.2.3	Support incorporation of performance-based Natural Infrastructure into revision of National Water Resources Plan	Technical Assistance	Lima	National	No	Q2 FY2020	10%	10%	10%	---	Delayed	The proceedings were initiated in Q3 by the authority
1.3.2.6	Support implementation of the National Gender and Climate Change Action Plan	Technical Assistance	Lima	National	Yes	Q4 FY2020	15%	25%	35%	---	On-Track	
1.3.2.7	Implement legal protections to address illegal harms to ecosystem supported by MRSE	Technical Assistance	Lima	National	No	Q3 FY2020	10%	70%	90%	---	Delayed on track	
1.3.3.5	Develop model contracts and Terms of Reference for formulating and executing public investments in NI	Technical Assistance	Lima	National	No	Q4 FY2020	10%	15%	30%	---	On-Track	
1.3.4.1	Support the incorporation of natural infrastructure into watershed management plans (coordinate with 3.1.4.4)	Technical Assistance	Prioritized sites	Regional basin	No	Q4 FY2020	10%	30%	50%	---	On-Track	
1.3.4.2	Support the incorporation of natural infrastructure into EPS PMOs and intervention plans (coordinate with 3.1.4.4)	Technical Assistance	TBD	National	No	Q4 FY2020	60%	75%	85%	---	On-Track	

1.3.4.4	Support incorporation of NI into Reconstrucción con Cambios Integrated Plans to Control Flood Risk	Technical Assistance	TBD	National	No	Q4 FY2020	10%	30%	50%	---	On-Track	
1.3.5.1	Support ANA and watershed councils in review of institutional and legal roles and priorities, including support to prepare proposals for institutional and normative reforms to strengthen watershed councils and watershed management planning	Technical Assistance	TBD	Regional Basin	No	Q2 FY2020	15%	20%	30%	---	Delayed	Constant changes from the ANA authorities.
1.3.5.2	Develop Institutional Capacity-Building Diagnostics and Action Plans in prioritized institutions	Technical Assistance	Lima	National	Yes	Q2 FY2020	70%	100%	---	---	Completed	
1.3.5.4	Provide customized technical assistance and training to prioritized institutions	Technical Assistance	Lima	National	Yes	Q4 FY2020	0%	10%	25%	---	On-Track	
1.3.5.5	Provide institutional strengthening support to watershed councils and ANA, including for mainstreaming gender	Technical Assistance	Lima	National	Yes	Q3 FY2020	10%	25%	40%	---	Delayed on track	
1.3.5.6	Provide institutional strengthening support to EPS, with emphasis on SEDAPAL, including for mainstreaming gender	Technical Assistance	Lima	Regional basin	Yes	Q3 FY2020	10%	25%	40%	---	Delayed on track	
2.1.1.2	Convene a technical group of leading research and knowledge management institutions to prioritize Natural Infrastructure research	Technical assistance	Lima	National	No	Q4 FY2020	40%	50%	60%	---	On-Track	
2.1.1.5	Develop and publish Natural Infrastructure Research Agenda	Technical assistance	Lima	National	No	Q2 FY2020	80%	80%	90%	---	Delayed	The validation was planned to be carried out at the science event
2.1.2.2	Map existing data sources to meet information needs (hydrological and socio-economic data sources) identified in 2.1.2.1	Dissemination product	---	National	Yes	Q4 FY2020	80%	90%	95%	---	On-Track	
2.1.2.5	Prepare wetland inventories in priority watersheds	Dissemination product	---	National	No	Q3 FY2020	30%	50%	70%	---	On-Track	
2.1.3.1	TRAINING: Monitoring & Evaluation for Performance-Based Natural Infrastructure (In-Person Phase of ADERASA Course)	Training	Lima	National	Yes	Q4 FY2020	0%	0%	0%	---	Canceled	
2.1.3.2	Assess minimum baseline hydrological monitoring needed in learning sites to respond to information needs at site and watershed scales (as identified in 2.1.2.1)	Technical assistance	---	Regional basin	No	Q2 FY2020	70%	80%	80%	---	Delayed	Collection of information in the field is pending

2.1.3.4	Address monitoring equipment needs in existing iMHEA monitoring sites in priority watersheds (ChiRiLu & Piura), and install new hydrological monitoring equipment in learning sites (per needs identified in 2.1.3.2)	Technical assistance	---	Regional basin	No	Q4 FY2020	70%	80%	80%	---	On-Track	
2.1.3.5	iMHEA workshop and leaders in knowledge management in Natural Infrastructure	Training	Lima	National	Yes	Q3 FY2020	0%	10%	30%	---	Delayed on track	Due to the context of COVID it has been changed to a virtual meeting proposal
2.1.3.6	Produce and disseminate monitoring protocols	Dissemination product	Lima	National	No	Q2 FY2020	40%	40%	50%	---	Delayed on track	The preparation and validation of monitoring protocols is conditional on the completion of the iMHEA Assembly.
2.1.3.7	Strengthen the iMHEA network institutionally as a network and community of practice, providing technical support to member research efforts	Technical assistance	Lima	National	Yes	Q2 FY2020	40%	50%	60%	---	Delayed on track	Like to the previous activity
2.1.3.8	Convene "State of Science on Natural Infrastructure" event in partnership with iMHEA	Training	Lima	National	Yes	Q3 FY2020	0%	15%	---	---	Canceled	Due to the context of COVID, this event has been postponed and is expected to take place in 2021
2.1.4.1	Prepare meta-analyses of current state of knowledge in 2 priority research areas	Dissemination product	TBD	Regional basin	No	Q4 FY2020	40%	50%	60%	---	On-Track	
2.1.4.2	Develop criteria and processes for implementing demand-driven mechanism to address knowledge gaps	Dissemination product	---	National	Yes	Q1 FY2020	80%	90%	100%	---	Completed	The contributions of specialists are being incorporated
2.1.4.3	Implement demand-driven mechanism to support research that contributes to prioritized knowledge gaps	Dissemination product	---	National	Yes	Q4 FY2020	30%	40%	50%	---	On-Track	
2.2.1.2	Develop and publish guide: Using Hydrological Models to Design Natural Infrastructure in Peru	Dissemination product	Lima	National	No	Q3 FY2020	50%	55%	70%	---	Delayed on track	It has been decided to include practical cases applying our tools and we are in the process of running them
2.2.1.3	Prepare recommendations on methodologies and models to estimate the Natural Infrastructure gap and to evaluate Natural Infrastructure projects, in terms of relevant Public Investment indicators	Dissemination product	National	Regional basin	No	Q3 FY2020	90%	95%	97%	---	On-Track	
2.2.1.4	Catalog of natural infrastructure investment	Dissemination product	Lima	National	No	Q4 FY2020	20%	40%	50%	---	On-Track	

2.2.2.2	Webinar series for Community of Practice presenting new tools and guidelines with experts	Dissemination product	Virtual	National	Yes	Q3 FY2020	20%	25%	30%	---	Delayed on track	
2.2.3.1	Map and assess existing Information Systems and information flows related to Natural Infrastructure (e.g., SINIA, SNIRH, SNIRH "nodes" in watershed councils, information systems of SUNASS and EPS)	Technical Assistance	Lima	National	No	Q2 FY2020	20%	40%	60%	---	Delayed On-Track	
2.2.3.2	Incorporate natural infrastructure into information systems used by watershed councils	Technical Assistance	Prioritized sites	Regina basin	Yes	Q4 FY2020	40%	50%	60%	---	On-Track	
2.2.4.1	Develop methodologies to evaluate public investment projects based on hydrological outcomes, linked to water security components (following recommendations in 2.2.1.3)	Technical Assistance	Lima	National	No	Q4 FY2020	20%	25%	35%	---	On-Track	
2.2.5.1	Design Women's Leadership Program	Technical Assistance	Lima	National	Yes	Q4 FY2020	20%	30%	70%	---	On-Track	
2.2.5.2	Support women researchers working on key natural infrastructure questions	Technical Assistance	Lima	National	Yes	Q4 FY2020	20%	50%	70%	---	On-Track	
2.2.5.4	Implement women's leadership program	Technical Assistance	Lima	National	Yes	Q4 FY2020	0%	0%	40%	---	On-Track	
3.1.2.1	Define scopes, with upstream and downstream stakeholders of learning sites	Technical Assistance	Prioritized sites	Learning site	No	Q2 FY2020	80%	80%	80%	---	Delayed On-Track	
3.1.2.2	Design and implement hydrological and socio-economic monitoring and evaluation systems in learning sites	Technical Assistance	Prioritized sites	Learning site	Yes	Q3 FY2020	50%	50%	50%	---	Delayed on track	
3.1.2.3	Develop local gender gap assessments and action plans	Dissemination products	Prioritized sites	Learning site	Yes	Q4 FY2020	30%	40%	60%	---	On-Track	
3.1.3.3	Consolidate, publish and maintain Project Design Toolbox in web-accessible, user-friendly database	Technical assistance	Lima	National	Yes	Q4 FY2020	10%	30%	50%	---	On-Track	
3.1.3.4	Implement diploma in investment project design and management for EPS, GORE, GL	Technical assistance	Lima	National	Yes	Q4 FY2020	10%	20%	40%	---	On-Track	
3.1.3.5	Develop and implement community of practice for project designers, including learning sites and other MRSE/NI leaders	Technical assistance	Virtual	National	Yes	Q2 FY2020	10%	15%	25%	---	Delayed On-Track	There has been a redefinition of the community of practice, there is the activation document

3.1.4.1	Design portfolio-scale monitoring and evaluation system for SEDAPAL MRSE Program (ChiRiLu)	Technical assistance	Lima	Regional basin	Yes	Q2 FY2020	25%	30%	40%	---	Delayed On-Track	
3.1.4.5	Develop multi-sector, performance-based planning framework in Quilca-Chili (coordinate with 1.3.4.2)	Technical assistance	Arequipa	Regional basin	Yes	Q3 FY2020	0%	0%	0%	---	Not yet initiated	
3.1.4.6	Develop multi-sector, performance-based planning framework in Tambo-Moquegua (coordinate with 1.3.4.2)	Technical assistance	Moquegua	Regional basin	Yes	Q4 FY2020	0%	10%	20%	---	On-Track	
3.1.4.7	Develop multi-sector, performance-based planning framework in Vilcanota-Urubamba (coordinate with 1.3.4.2)	Technical assistance	Cusco	Regional basin	Yes	Q4 FY2020	0%	0%	0%	---	Not yet initiated	
3.1.5.1	Develop and implement strategy for scaled-up pipeline of projects for implementing SEDAPAL MRSE program	Technical assistance	Lima	Regional basin	No	Q4 FY2020	100%	---	---	---	Completed	
3.1.5.2	Review and match projects in public investment database with potential investors	Technical assistance	Prioritized sites	Regional basin	No	Q4 FY2020	20%	25%	35%	---	On-Track	
3.1.5.3	Develop effective, sustainable and equitable projects responsive to specific natural infrastructure investors (public and private) and community priorities	Technical assistance	Prioritized sites	Regional basin	Yes	Q4 FY2020	60%	65%	70%	---	On-Track	
3.1.6.2	Implement demand-driven support to unlock effective, gender-equitable NI investments through Incubator	Technical assistance	Prioritized sites	Regional basin	Yes	Q4 FY2020	70%	80%	90%	---	On-Track	
3.2.1.2	Provide technical assistance by public investment specialists to address bottlenecks in PIP approvals in priority watersheds	Technical assistance	Prioritized sites	Regional basin	Yes	Q2 FY2020	80%	80%	80%	---	Delayed On-Track	
3.2.1.4	Support development and implementation of pilot MERESE through direct contracts ("modality 2")	Technical assistance	Prioritized sites	Regional basin	Yes	Q4 FY2020	30%	30%	40%	---	On-Track	
3.2.1.5	Develop guidance on public investment in natural infrastructure through "investments of optimization, marginal expansion, relocation and rehabilitation" (IOARR)	Dissemination products	Lima	National	No	Q2 FY2020	80%	100%	---	---	Completed	
3.2.1.6	Mobilize funds for public investment through IOARR	Technical assistance	TBD	National	Yes	Q3 FY2020	10%	20%	30%	---	On-Track	
3.2.1.7	Provide recommendations for the revision and future application of the simplified technical file ("ficha simplificada") for natural infrastructure investments, with gender focus	Technical assistance	Lima	National	No	Q3 FY2020	60%	100%	---	---	Completed	

3.2.1.8	Mobilize investment for natural infrastructure through public trust fund	Technical assistance	Lima	National	No	Q3 FY2020	10%	30%	40%	---	Delayed on track	Coordination with government authorities has been delayed
3.2.2.3	Develop business case and mobilize private sector funds for natural infrastructure investment	Technical assistance	TBD	National	Yes	Q4 FY2020	20%	25%	40%	---	On-Track	
3.2.2.4	Mobilize funds from Disaster Risk Management and Climate Change Adaptation tariffs for natural infrastructure Project	Technical assistance	TBD	National	Yes	Q4 FY2020	60%	70%	70%	---	On-Track	
3.2.2.9	Mobilize funds for natural infrastructure through Reconstrucción con Cambios	Technical assistance	TBD	National	No	Q4 FY2020	50%	60%	60%	---	On-Track	
3.2.3.2	Pilot cross-sector partnership to cover pre-investment finance needs	Technical assistance	TBD	Regional basin	Yes	Q4 FY2020	40%	45%	50%	---	On-Track	
3.2.4.1	Support/facilitate operationalization of MRSE good governance platforms in priority watersheds	Technical assistance	Prioritized sites	Regional basin	Yes	Q4 FY2020	45%	50%	50%	---	On-Track	
3.2.5.1	Design and implement action plans for supporting 'conservación productiva' in learning sites (ID beneficiaries, strategies, roles, outcomes, link to MRSE strategies)	Technical assistance	TBD	National	Yes	Q4 FY2020	30%	30%	40%	---	On-Track	
3.2.5.2	Develop and implement commercialization strategies and improve market linkages for NI-linked, gender-equitable productive economic activities in priority watersheds	Technical assistance	Prioritized sites	Regional basin	Yes	Q4 FY2020	10%	20%	30%	---	On-Track	
3.2.5.3	Develop and implement blended finance models for seeding and growing NI-linked productive activities in priority watersheds	Technical assistance	Prioritized sites	Regional basin	Yes	Q3 FY2020	10%	20%	30%	---	Delayed on track	
3.2.5.5	Through the Incubator, provide support to develop, seed and grow NI-linked productive activities throughout Peru, in response to demand and opportunity	Technical assistance	TBD	National	Yes	Q4 FY2020	30%	35%	40%	---	On-Track	
3.3.1.2	Scope the interdisciplinary methodological approach to ex ante hydro-economic studies	Technical assistance	TBD	National	Yes	Q2 FY2020	50%	80%	100%	---	Completed	
3.3.2.1	Prepare hydro-socioeconomic studies of the sites (positive/negative impacts)	Technical assistance	Prioritized sites	Regional basin	Yes	Q3 FY2020	20%	20%	20%	---	Delayed on track	
3.3.2.2	Document learning site conceptual models, results chains, with narrative describing gender-sensitive strategies for NI conservation and baseline data and local gender gap analysis (link to 3.1.2)	Technical assistance	TBD	National	Yes	Q3 FY2020	80%	90%	95%	---	On-Track	

3.3.2.3	Qualitative documentation of learning site baselines	Technical assistance	Prioritized sites	Learning site	Yes	Q3 FY2019	70%	70%	75%	---	On-Track	
4.1.1.2	Train team on MEL Plan and data collection	Information management	Prioritized sites	Learning site	Yes	Q4 FY2019	0%	10%	30%	---	On-Track	
4.1.1.3	Prepare baseline	Information management	Lima	National	Yes	Q1 FY2019	0%	---	---	---	Canceled	There are no previous records or results related to natural infrastructure because it is a new approach
4.1.1.4	Design and implement project information system	Information management	Lima	National	Yes	Q2 FY2019	75%	80%	90%	---	Completed	
4.1.1.5	Consolidate information (data, graphics, anecdotes) on the benefits of IN and gender equity in decision-making for use in comms products, informing policies, etc.	Information management	Lima	National	Yes	Q4 FY2019	10%	20%	50%	---	On-Track	
4.1.1.6	Develop and apply methodology for estimating NIVWS projected hydrological benefits	Information management	Lima	National	Yes	Q4 FY2020	0%	0%	0%	---	Not yet initiated	
4.1.1.7	Study on the use of information propagated by the project	Information management	Lima	National	Yes	Q4 FY2020	0%	0%	0%	---	Not yet initiated	
4.1.1.9	Economic benefits of natural infrastructure study	Information management	Lima	National	Yes	Q4 FY2020	0%	0%	0%	---	Not yet initiated	
4.1.1.10	Qualitative study on perception of importance and benefits of natural infrastructure	Information management	Lima	National	Yes	Q4 FY2020	0%	0%	0%	---	Not yet initiated	
4.1.1.14	Systematization of experiences and lessons learned from the Project	Information management	Lima	National	Yes	Q4 FY2020	0%	0%	0%	---	Not yet initiated	
4.1.1.16	Presentation of project reports	Information management	Lima	Lima	Yes	Q4 FY2020	25%	50%	75%	---	On-Track	
4.2.3.1	Develop and publish gender gap analysis (national and learning site level)	Information management	Prioritized sites	National	Yes	Q1 FY2020	90%	100%	---	---	Completed	
4.2.3.2	Develop Gender Policy for Consortium	Information management	Lima	Lima	Yes	Q4 FY2020	10%	20%	40%	---	Completed	

Annex 2. Tracking Table

Figures updated this quarter in the table below are highlighted

Indicators	Baseline	2018		2019		2020		2021		2022		2023		Total	
		Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
EST-1 - Number of laws, policies, regulations, or standards addressing climate change adaptation formally proposed, adopted, or implemented as supported by USG assistance (EG.11.3)	38 implemented Detail: 4 Laws 5 Plans 29 Regulations 7 national level 31 subnational level	4	1 1 proposed Law	5	3 2 proposed regulations 1 adopted regulations	5	2 adopted 2 proposed	5	---	6	---	8	---	33	8 4 proposed 3 adopted 1 adopted
Sub target: • Number of legal instruments drafted, proposed or adopted with USG assistance designed to promote gender equality or non-discrimination against women or girls at the national or sub-national level (GNDR-1)	TBD	---	0	1	0	3	1	3	---	3	---	3	---	13	1
EST-2: Number of people using climate information or implementing risk-reducing actions to improve resilience to climate change as supported by USG assistance (EG.11-6) <i>Beginning in 2020.</i>	TBD	---	---	---	---	75	---	110	---	105	---	75	---	365	0
Sub target: • Number of women using information or implementing actions <i>Beginning in 2020</i>	TBD	---	---	---	---	15	---	25	---	25	---	25	---	90	0
EST-3: Amount of investment mobilized (in USD) for climate change adaptation as supported by USG assistance (EG. 11-4). <i>Beginning in 2019</i>	1,456,275 USD In projects in “physical execution” FY 2017	---	---	8	0	10	0.9 MM USD ¹	10	---	12	---	5	---	45	0.9 MM USD

¹ Final technical file “Recovery of the Ecosystemic Water Regulation Service of the Milloc Micro-basin, Carampoma District, Huarochiri Province, Lima Region”

EST-4: Number of hectares of biologically significant areas under improved natural resource management as a result of USG assistance (EG.10-2-2). <i>Beginning in 2019</i>	13,413 has. In projects in physical execution	---	---	2 500	0	4 000	---	4 000	---	5 500	---	7 000	---	23 000	0
EST-5: Number of people with improved economic benefits derived from sustainable natural resource management and/or biodiversity conservation as a result of USG assistance (EG.10.2-3) <i>Beginning in 2020.</i>	TBD	---	---	---	---	TBD	---	TBD	---	TBD	---	---	---	TBD	0
Sub target: ● Number of women with improved economic benefits ● Percentage of female participants in USG-assisted programs designed to increase access to productive economic resources (assets, credit, income or employment) (G---D-2) <i>Beginning in 2020.</i>	TBD	---	---	---	---	TBD	---	TBD	---	TBD	---	---	---	TBD	0
	TBD	---	---	---	---	50%	---	50%	---	50%	---	---	---	50%	0
EST-6: Number of people trained in climate change adaptation supported by USG assistance (EG. 11-1).	110 Women: 42 Men: 68	130	306 M: 207 F: 99	215	619 M: 358 F: 261	330	184 M: 115 F: 69	315	---	595	---	215	---	1800	1120 M: 691 F: 429
Sub target: ● Number of women trained	42	---	99	74	261	165	69	157	---	298	---	108	---	900	429
EST-7: Number of institutions with improved capacity to assess or address climate change risks supported by USG assistance (EG.11-2) <i>Beginning in 2020</i>	TBD	---	---	7	0	7	---	5	---	5	---	---	---	7	0
Sub target: ● Number of institutions with greater capacity in gender approach <i>Beginning in 2020</i>	TBD	---	---	2	0	2	---	2	---	2	---	---	---	2	0
EST-8: Greenhouse gas (GHG) emissions, estimated in metric tons of CO2 equivalent, reduced, sequestered, or avoided through sustainable landscapes activities supported by USG assistance (EG.13-6). <i>Beginning in 2020</i>	TBD	TBD	---	TBD	TBD	TBD	---	TBD	---	TBD	---	TBD	---	TBD	---

Annex 3: Events

Teamdesk code	Description							Link to NIWS Results Framework and cross-cutting strategies		Participants		
	Name	Type of event	Start Date (dd/mm/yyyy)	End Date (dd/mm/yyyy)	Co-Organizers	Place	N° of hours	Activity code	Explicit Gender Focus (*)	Women	Men	Total
Training events												
EVE – 120	Virtual course: Formulation of investments related to NI and disaster risk management within the framework of comprehensive plans in basins prioritized by RCC	Training	13/04/2020	24/05/2020	MINAGRI	Virtual	64	3.2.4.1	Yes	31	92	123
Stakeholder engagement events												
EVE – 121	Technical Platform 14th meeting: HIRO presentation	Stakeholder engagement	06/04/2020	06/04/2020	---	Virtual	2	1.2.1.3	No	12	19	31
EVE – 122	Technical Platform 15th meeting: Incubator advance	Stakeholder engagement	04/05/2020	04/05/2020	---	Virtual	2	1.2.1.3	No	15	28	43
EVE - 123	Technical Platform 16th meeting: Research agenda	Stakeholder engagement	01/06/2020	01/06/2020	---	Virtual	2	1.2.1.3	No	13	25	38
Awareness raising and technical assistance events												
EVE-114	Webinar: Active role of young people for the conservation and restoration of ecosystems	Awareness Raising	28/04/2020	28/04/2020	---	Virtual	2	2.2.2.2	No	423	206	629
EVE-115	Webinar: IOARR investments as a measure of rapid impact on the ecosystem's recovery	Awareness Raising	06/05/2020	06/05/2020	MINAM	Virtual	2	2.2.2.2	No	285	362	648
EVE-119	Webinar: Roadmap for investments in natural infrastructure	Awareness Raising	24/06/2020	24/06/2020	---	Virtual	2	2.2.2.2	No	246	294	540
Dissemination events												
EVE-113	Webinar: Rapid Identification Tool for Natural Infrastructure Opportunities in Disaster Risk Management (HIRO-GRD)	Dissemination events	22/04/2020	22/04/2020	MINAGRI, SEFOR, RCC	Virtual	2	2.2.2.2	No	352	563	915
EVE-116	Webinar: Impacts of infiltration ditches on water and soil - What do we know?	Dissemination events	22/05/2020	22/05/2020	---	Virtual	2	2.2.2.2	No	409	544	953
EVE-117	Webinar: Sustainable solutions with natural infrastructure within the framework of RCC	Dissemination events	27/05/2020	27/05/2020	RCC	Virtual	2	2.2.2.2	No	307	362	669
EVE-118	Webinar: COVID -19, What do ecosystems tell us?	Dissemination events	17/06/2020	17/06/2020	MINAGRI, ANA, ACCA	Virtual	2	2.2.2.2	No	337	270	607

(*) All NIWS events consider gender in the composition of speakers and participants. Events with an explicit gender focus also include a significant component of event content on gender

Annex 4. Technical products

N°	Name	Date (dd/mm/yyyy)	Status			Link to NIWS Results Framework and cross-cutting strategies		Dissemination				Link
			In Progress	Finished	Approved	Activity code	Gender	Printed Format	N° copies	Platform	Audience	
1	HIRO Guide - Rapid identification tool for natural infrastructure opportunities in disaster risk management	22/04/2020	---	---	X	2.1.4.1	No	---	---	Web	1 620	https://www.forest-trends.org/publications/guia-hiro/
2	Impacts of infiltration ditches on water and soil: What do we know?	15/05/2020	---	---	X	2.1.4.1	No	---	---	Web	470	https://www.forest-trends.org/publications/impactos-de-las-zanjas-de-infiltracion-en-el-agua-y-los-suelos/
3	Research Summary - Impacts of infiltration ditches on water and soil: What do we know?	01/06/2020	---	---	X	2.1.4.1	No	---	---	Web	20	https://www.forest-trends.org/wp-content/uploads/2020/06/Resumen-Zanjas-final-02.06.pdf
4	Interactive infographic of IOARR roadmap	10/06/2020	---	---	X	3.2.1.5	No	---	---	Web	1 500	https://condesan.org/inshadv/0001.html
5	Infographic of IOARR roadmap	20/06/2020	---	---	X	3.2.1.5	No	---	---	Web	1 500	https://condesan.org/wp-content/uploads/2020/06/infograf%C3%ADa-hoja-de-ruta-IOARR-FINAL-PUBLICAR.pdf
6	Infographic: what strategic assets to intervene with IOARR in ecosystems?	24/06/2020	---	---	X	3.2.1.5	Yes	---	---	Webinar/PPT	9 681	https://www.forest-trends.org/publications/infografia-que-activos-estrategicos-intervenir-con-ioarr-en-ecosistemas/?fbclid=IwAR1U2OMTW0OlnAlZB0oIXRNYZldDmUePsmjYascl19-FpIADE_I0v5NHQ https://condesan.org/recursos/infografia-activos-estrategicos-intervenir-ioarr-ecosistemas/?fbclid=IwAR2sZ0-0PKVPM1rZ88XiuL5w_FhsHD3KgWfEqodPu9UzDj_ljCRLcsw_b6o
7	Story map of CHIRILUMA	30/06/2020	---	X	---	3.3.2.3.	Yes	---	---	Web	ND	https://arcg.is/0aXOHG

Annex 5. Communications products

N°	Name	Type	Date (dd/mm/yyyy)	Status			Link to NIWS Results Framework and cross-cutting strategies		Dissemination				Link
				Finished	Approved	Published	Activity code	Gender	Printed format	N° copies	Platform	Audience	
1	Ecosystems #CuidarlosCuidarnos	Gif	02/04/2020	---	---	X	1.1.5.2	Yes	---	---	Social media	34 101	https://www.facebook.com/ForestTrends/videos/1034560220277231 https://www.facebook.com/CONDESANandes/posts/10157989836455690
2	Women of water: Flora Magdomia	Video	06/04/2020	---	---	X	1.1.5.2	Yes	---	---	Social media	59 086	https://www.facebook.com/ForestTrends/posts/2578978822373900 https://www.facebook.com/CONDESANandes/posts/10158003540505690
3	World Health Day	Graphic	07/04/2020	---	---	X	1.1.5.2	Yes	---	---	Social media	2 935	https://www.facebook.com/ForestTrends/posts/2579559892315793
4	Quarterly newsletter	Newsletter	13/04/2020	---	---	X	1.1.5.2	Yes	---	---	Mailing	2 391	---
5	Virtual course "Formulation of investments related to NI and disaster risk management in basins prioritized by RCC"	Brochure	15/04/2020	---	---	X	1.1.5.2	Yes	---	---	Virtual room	130	https://aulainfraestructuranatural.org/mod/resource/view.php?id=12
6	Welcome video: Virtual course "Formulation of investments related to NI and disaster risk management in basins prioritized by RCC"	Video	15/04/2020	---	---	X	1.1.5.2	Yes	---	---	Virtual room	150	https://aulainfraestructuranatural.org/course/view.php?id=4
7	Webinar: Rapid Identification Tool for Natural Infrastructure Opportunities in Disaster Risk Management – HIRO	Graphic	17/04/2020	---	---	X	1.1.5.2	No	---	---	Social media	100 629	https://www.facebook.com/ForestTrends/posts/2587681618170287 https://www.facebook.com/CONDESANandes/posts/10158039938995690
8	Earth day	Video	22/04/2020	---	---	X	1.1.5.2	Yes	---	---	Social media	29 768	https://www.facebook.com/watch/?v=832161010626748
9	Launch of the HIRO guide	Graphic	22/04/2020	---	---	X	1.1.5.2	Yes	---	---	Social media	949	https://www.facebook.com/ForestTrends/posts/2592041864400929
10	Webinar: Active role of young people for the conservation and restoration of ecosystems	Graphics	27/04/2020	---	---	X	1.1.5.2	Yes	---	---	Social media	123 030	https://www.facebook.com/CONDESANandes/posts/10158077005625690 https://www.facebook.com/ForestTrends/posts/2592687751003007

11	Webinar: IOARR investments as a measure of rapid impact on the ecosystem's recovery	Graphic	30/04/2020	---	---	X	1.1.5.2	No	---	---	Social media	1 242	https://www.facebook.com/ForestTrends/posts/2598758793729236
12	Virtual course "Identification and formulation course of public investment projects in natural infrastructure"	Brochure	04/05/2020	---	---	X	1.1.5.2	Yes	---	---	Virtual room	130	https://aulainfraestructuranatural.org/mod/resource/view.php?id=288
13	Learn more about IOARR	Graphic	12/05/2020	---	---	X	1.1.5.2	No	---	---	Social media	16 652	https://www.facebook.com/ForestTrends/posts/2608655446072904 https://www.facebook.com/CONDESANandes/posts/10158133806595690
14	Webinar: Impacts of infiltration ditches on water and soil - What do we know?	Graphic	12/05/2020	---	---	X	1.1.5.2	No	---	---	Social media	921	https://www.facebook.com/ForestTrends/posts/2619050101700105 https://www.facebook.com/CONDESANandes/posts/10158132517155690
15	Women leadership program for water management	Flyer	15/05/2020	---	---	X	1.1.5.2	Yes	---	---	Social media	35 629	http://www.cedepas.org.pe/sites/default/files/archivos/brochure_programa_de_liderazgo.pdf?fbclid=IwAR3yl433-gzdSMV2yzFcVA5llv2Vj8XISsdI9IKD0d0PkBF6u50kIQ2uws
16	Learn more about infiltration ditches	Graphic	18/05/2020	---	---	X	1.1.5.2	Yes	---	---	Social media	6 020	https://www.facebook.com/ForestTrends/posts/2613241322280983 https://www.facebook.com/CONDESANandes/posts/10158152171120690
17	Call for women's leadership program for water management	Graphic	19/05/2020	---	---	X	1.1.5.2	Yes	---	---	Social media	667	https://www.facebook.com/CONDESANandes/posts/10158156342540690 https://www.facebook.com/ForestTrends/posts/2619050101700105
18	Webinar: Sustainable solutions with natural infrastructure within the framework of RCC	Graphic	19/05/2020	---	---	X	1.1.5.2	No	---	---	Social media	39 966	https://www.facebook.com/ForestTrends/photos/a.1544341955837597/2615948542010261/ https://www.facebook.com/CONDESANandes/posts/10158177024245690
19	Biological Diversity Day	Graphic	22/05/2020	---	---	X	1.1.5.2	Yes	---	---	Social media	1 945	https://www.facebook.com/ForestTrends/photos/a.1544341955837597/2616451081960007/
20	Students testimonial video of the virtual course "Formulation of investments related to NI and disaster risk management in basins prioritized by RCC"	Video	30/05/2020	---	---	X	1.1.5.2	Yes	---	---	Virtual room	150	https://aulainfraestructuranatural.org/mod/page/view.php?id=299

21	Tales for the sons and daughters of the earth on world environment day	Graphic	03/06/2020	---	---	X	I.1.5.2	Yes	---	---	Social media	69 290	https://www.facebook.com/ForestTrends/photos/a.1544341955837597/2626268354311613/ https://www.facebook.com/CONDESANandes/posts/10158201779380690
22	88 women from six regions start a women's leadership pioneering program in water management today	Press release	10/06/2020	---	---	X	I.1.5.2	Yes	---	---	Social media	2 958	https://www.forest-trends.org/pressroom/88-mujeres-de-6-regiones-inician-hoy-programa-pionero-de-liderazgo-de-mujeres-para-la-gestion-del-agua/?fbclid=IwAR0NwAE5iGgH1b_WOGr5sFrN3p0Lijpsktee8lCGJZ19u3CODgolx0jHC50 https://condesan.org/2020/06/12/88-mujeres-6-regiones-inician-hoy-programa-pionero-liderazgo-mujeres-la-gestion-del-agua/?fbclid=IwAR0E-Mn4XG2OhZBURYRCNQRNk6k553q2VyNvFDnNlYfm94vq-Pix1u_rbAk
23	Webinar: COVID -19, What do ecosystems tell us?	Graphic	12/06/2020	---	---	X	I.1.5.2	Yes	---	---	Social media	32 508	https://www.facebook.com/ForestTrends/photos/a.1544341955837597/2633839340221181/ https://www.facebook.com/CONDESANandes/photos/a.10150984616180690/10158230033550690/
24	World day to combat drought and desertification	Graphic	17/06/2020	---	---	X	I.1.5.2	No	---	---	Social media	4 755	https://www.facebook.com/ForestTrends/photos/a.1544341955837597/2637761649828950/ https://www.facebook.com/CONDESANandes/photos/a.10150984616180690/10158244084980690/
25	Webinar: Roadmap for investments in natural infrastructure	Graphic	19/06/2020	---	---	X	I.1.5.2	Yes	---	---	Social media	749	https://www.facebook.com/ForestTrends/photos/a.1544341955837597/2640167586255023/ https://www.facebook.com/CONDESANandes/photos/a.10150984616180690/10158250497360690/
26	Farmers' day	Graphic	24/06/2020	---	---	X	I.1.5.2	Yes	---	---	Social media	8 370	https://www.facebook.com/ForestTrends/photos/pch.2643603085911473/2643601502578298 https://www.facebook.com/CONDESANandes/posts/10158265405410690?__tn__=-R

Annex 6: Media reports associated with NIWS activities and outreach

N°	Name	Date (dd/mm/yyyy)	Media			Link
			Name	Type	Audience	
1	Seven regions would benefit from natural infrastructure projects	29/05/2020	Perú Construye	Web	15 000	https://peruconstruye.net/2020/05/29/siete-regiones-podran-beneficiarse-con-proyectos-de-infraestructura-natural/
2	Seven regions would benefit from natural infrastructure projects	29/05/2020	Info región	Web	7. 000	http://www.inforegion.pe/273222/siete-regiones-podran-beneficiarse-con-proyectos-de-infraestructura-natural/
3	Natural infrastructure projects in seven regions	31/05/2020	Expreso	Diario	25 000	Printed version
4	For the first time: seven regions could benefit from natural infrastructure projects	31/05/2020	Andina	Web	220 000	https://andina.pe/agencia/noticia-por-primera-vez-7-regiones-se-beneficiaran-proyectos-infraestructura-natural-799659.aspx
5	Seven regions would benefit from natural infrastructure projects	31/05/2020	La República	Web	730 000	https://larepublica.pe/sociedad/2020/05/31/reconstruccion-con-cambios-siete-regiones-podran-beneficiarse-con-proyectos-de-infraestructura-natural/
6	Seven regions would benefit from natural infrastructure projects	31/05/2020	El Peruano	Web	160 000	https://elperuano.pe/noticia-siete-regiones-se-beneficiaran-proyectos-infraestructura-natural-96678.aspx
7	Infrastructure in seven regions	01/06/2020	El Peruano	Diario	160 000	https://drive.google.com/file/d/1ZBz97Lj08Z4lI3VWlEtm-jAZwC-M5VbmZ/view?usp=sharing
8	Infrastructure in seven regions	01/06/2020	El Peruano	Web	160 000	http://www.elperuano.pe/noticia-infraestructura-siete-regiones-96681.aspx
9	Natural infrastructure projects will be ready to recover ecosystems in seven regions	01/06/2020	Trome	Web	502 000	https://trome.pe/actualidad/nacional/alistan-proyectos-de-infraestructura-natural-para-recuperar-ecosistemas-en-7-regiones-nnpp-noticia/?ref=tr
10	Execution of natural infrastructure projects will recover ecosystems in seven regions	01/06/2020	Ojo	Web	680 000	https://ojo.pe/regionales/recuperaran-ecosistemas-con-la-ejecucion-de-proyectos-de-infraestructura-natural-en-siete-regiones-nnpp-noticia/?ref=oir
11	Execution of natural infrastructure projects will benefit seven regions of the country	01/06/2020	Correo	Web	420 000	https://diariocorreo.pe/peru/siete-regiones-se-beneficiaran-con-la-ejecucion-de-proyectos-de-infraestructura-natural-nnpp-noticia/?ref=dcr
12	Infrastructure in seven regions	01/06/2020	Entorno inteligente	Web	6 000	https://www.entornointeligente.com/infraestructura-en-siete-regiones-3/
13	Seven regions would benefit from natural infrastructure projects	01/06/2020	JC Magazine	Web	5 000	https://icmagazine.com/7-regiones-se-beneficiarian-con-proyectos-de-infraestructura-natural/
14	Seven regions will benefit from the execution of natural infrastructure projects	01/06/2020	Perú21	Web	700 000	https://peru21.pe/peru/siete-regiones-se-beneficiaran-con-la-ejecucion-de-proyectos-de-infraestructura-natural-nnpp-noticia/

15	For the first time: seven regions could benefit from natural infrastructure projects	01/06/2020	Exitosa	Web	50 000	https://exitosanoticias.pe/vl/por-primera-vez-siete-regiones-podran-beneficiarse-con-proyectos-de-infraestructura-natural/
16	Seven regions would benefit from natural infrastructure projects	01/06/2020	El Regional de Piura	Web	55 000	https://www.elregionalpiura.com.pe/index.php/nacionales/156-provincias/42450-siete-regiones-podran-beneficiarse-con-proyectos-de-infraestructura-natural
17	Seven regions would benefit from natural infrastructure projects	03/06/2020	Agraria.pe	Web	12 000	https://agraria.pe/noticias/siete-regiones-podran-beneficiarse-con-proyectos-de-infraest-21669
18	Seven regions would benefit from natural infrastructure projects	06/06/2020	RPP Noticias	Televisión	72 000	http://cms.imedia.pe/2020/06/06/entrevista-al-director-del-proyecto-natural-para-la-seguridad-hidrica-fernando-momiy/30381545/4580
19	Seven regions would benefit from natural infrastructure projects	06/06/2020	RPP Noticias	Radio	480 000	http://cms.imedia.pe/2020/06/06/entrevista-al-director-del-proyecto-natural-para-la-seguridad-hidrica-fernando-momiy/30381545/4580
20	Seven regions would benefit from natural infrastructure projects	08/06/2020	Business Empresarial	Web	7 000	http://www.busesempresarial.com.pe/siete-regiones-podran-beneficiarse-con-proyectos-de-infraestructura-natural/
21	Women seek more participation in decision-making on water resources	19/06/2020	El Regional de Piura	Web	55 000	https://www.elregionalpiura.com.pe/index.php/nacionales/156-provincias/42880-buscan-que-mujeres-tengan-mas-participacion-en-la-toma-de-decisiones-sobre-recursos-hidricos
22	88 women leaders in water management from six regions of the country will be trained	20/06/2020	Correo	Web	420 000	https://diariocorreo.pe/peru/ministerio-de-la-mujer-capacitan-88-mujeres-lideres-gestion-agua-seis-regiones-peru-nnpp-noticia/?ref=dcr
23	Women leaders are trained in water management in six regions of the country	20/06/2020	Trome	Web	502 000	https://trome.pe/actualidad/nacional/ministerio-de-la-mujer-capacitan-a-88-mujeres-lideres-en-la-gestion-del-agua-en-seis-regiones-del-pais-nnpp-noticia/?ref=tr
24	88 women leaders in water management from six regions of the country will be trained	20/06/2020	Perú21	Web	700 000	https://peru21.pe/peru/capacitan-a-88-mujeres-lideres-en-la-gestion-del-agua-en-seis-regiones-del-pais-ministerio-de-la-mujer-nnpp-noticia/
25	In six regions of the country, 88 women leaders are trained in water management	20/06/2020	Ojo	Web	680 000	https://ojo.pe/regionales/ministerio-de-la-mujer-en-seis-regiones-del-pais-88-mujeres-lideres-son-capacitadas-en-la-gestion-del-agua-nnpp-noticia/?ref=ojr
26	Women from six regions will be trained in natural infrastructure and water management	21/06/2020	HBA Noticias Arequipa	Web	1 496	https://www.hbanoticias.com/capacitaran-a-mujeres-de-6-regiones-en-infraestructura-natural-y-gestion-del-agua/
27	Women from San Martín and other five regions will be trained in water management	21/06/2020	Ahora	Web	45 000	https://diarioahora.pe/san-martin/capacitan-a-mujeres-de-sm-en-gestion-del-agua-y-de-otras-5-regiones/
28	88 women from six regions will be trained in natural infrastructure and water management	21/06/2020	Andina	Web	220 000	https://andina.pe/agencia/noticia-capacitaran-a-88-mujeres-6-regiones-infraestructura-natural-y-gestion-del-agua-802499.aspx
29	Participation of women in decision-making on water resources will be promoted	21/06/2020	Info región	Web	7 000	http://www.inforegion.pe/274038/impulsan-participacion-de-mujeres-en-toma-de-decisiones-sobre-recursos-hidricos/

30	Women seek more participation in decision-making on water resources	22/06/2020	Agraria.pe	Web	12 000	https://agraria.pe/noticias/buscan-que-mujeres-tengan-mas-participacion-en-la-toma-de-de-21819
31	The leadership in water management of 88 women from six regions will be strengthen	24/06/2020	Construcción y vivienda	Web	1 000	https://www.construccionyvivien.com/2020/06/24/fortalecen-el-liderazgo-en-gestion-del-agua-de-88-mujeres-de-seis-regiones/
32	Women seek more participation in decision-making on water resources	25/06/2020	La República	Web	730 000	https://larepublica.pe/sociedad/2020/06/25/mujeres-tendran-mas-participacion-en-recursos-hidricos-saneamiento-mujeres-familia/
33	MINAGRI begins a campaign to preserve the moors in Piura	29/06/2020	Walac Noticias	Web	2 239	https://walac.pe/minagri-inicia-campana-para-preservar-los-paramos-en-piura/
34	MINAGRI begins a campaign to preserve the moors in Piura	29/06/2020	Agenda Ambiental	Facebook web	1 000	https://www.facebook.com/ambientalagenda/photos/a.345392515564483/2526751367428576/?type=3&theater&rdc=1&rdp
35	MINAGRI begins a campaign to preserve the moors in Piura	29/06/2020	Piura Noticias y eventos	Facebook web	2 200	https://www.facebook.com/PiuraNyE/photos/a.176620489068677/3458307530899940/?type=3&theater&rdc=1&rdp
36	The conservation of the moors in Piura will be promoted	29/06/2020	Exitosa Piura	Facebook web	13 500	https://www.facebook.com/112266073469607/posts/290402215655991/?rdc=2&rdp
37	MINAGRI promotes the moors conservation in Piura	29/06/2020	Radio La Mega Stereo Canchaque	Facebook web	1 000	https://mobile.facebook.com/story.php?story_fbid=768580127302594&id=100024518420454&rdc=1&rdp
38	MINAGRI promotes the moors conservation in Piura	29/06/2020	Opinión Informa	Facebook web	7 400	https://www.facebook.com/OpinionInforma/posts/1229567680721613
39	MINAGRI promotes the moors conservation in Piura	29/06/2020	Chulucanas Noticias	Web	15 000	http://www.chulucanasnoticias.com/minagri-promueve-la-conservacion-de-los-paramos-en-piura/?fbclid=IwAR2SgyOFL87vuoWCc4N-OW_qfISvTViE8V2Zf6ta7gUWetPZCoLLEkKVjg
40	MINAGRI promotes the moors conservation in Piura	30/06/2020	El Regional de Piura	Web	2 100	https://www.elregionalpiura.com.pe/index.php/regionales/150-piura/43125-minagri-promueve-la-conservacion-de-los-paramos-en-piura
41	The conservation of the ecosystem of the beautiful moors of Piura will be promoted	30/06/2020	Andina	Web	220 000	https://andina.pe/agencia/noticia-promueven-conservacion-del-ecosistema-de-hermosos-paramos-piura-803771.aspx
42	MINAGRI launches campaign to promote conservation of moors in Piura	30/06/2020	Cutivalú Radio	Web/radio	1 658	https://www.radiocutivalu.org/minagri-lanza-campana-para-promover-conservacion-de-paramos-en-la-region-piura/
43	Launch campaign "Know the water route: From the moors to your house"	30/06/2020	Pirhua.pe	Web	1 000	https://pirhua.pe/2020/06/30/lanzan-campana-conoce-la-ruta-del-agua-de-los-paramos-a-tu-casa/