



REQUEST FOR INFORMATION

Subject: Request for Information (RFI) No. AID-RFI-527-16-000001

Project Name: Securing Water Supply in the Context of Climate Change

Date of Issuance: March 7, 2016

Response due: MONDAY, MARCH 28, 2016 at 15:00 Lima Local Time

To email: mcourtad@usaid.gov

This is a Request for Information. This is not a Request for Proposals (RFP) or a Request for Applications (RFA) and is not to be construed as a commitment by the U.S. Government to issue any solicitation or Notice of Funding Opportunity, or ultimately award a contract or assistance agreement on the basis of this RFI, or to pay for any information voluntarily submitted as a result of this request.

USAID posts its competitive business opportunities on www.fbo.gov or www.grants.gov. It is the potential offeror's/applicant's responsibility to monitor these sites for announcements of new opportunities. Please note that responding to this Request for Information (RFI) will not give any advantage to any organization or individual in any subsequent competition. Responses may be used by USAID without restriction or limitation, therefore proprietary information should not be sent.

This USAID/Peru RFI is issued for the purpose to offer the opportunity for interested organizations and individuals to provide information, opinions, and recommendations on approaches for the implementation of a contemplative activity to address water security in the context of climate change.

Responses should not exceed ten (10) pages and should focus on addressing the objectives and illustrative results in the attached Statement of Objectives (SOO). Additional information limited to the offerors' corporate or organizational capability statement to carry out their approach and case studies supporting the strategies in the approach may be included as an annex. Please do not submit applications, proposals, resumes or promotional materials, as they will be discarded. The submission shall be written in English and typed on standard 8 1/2" x 11" paper (216mm by 297mm paper), single spaced, font size 12 with each page numbered consecutively.

This RFI will be open from the date of release through March 28, 2016 at 15:00 Lima Local time. Please send all responses to this RFI via email to mcourtad@usaid.gov. You will receive an electronic confirmation acknowledging receipt of your response, but will not receive feedback.

Questions regarding this RFI will not be answered. After USAID reviews and considers any responses, a decision will be made regarding whether and how to proceed with a new activity.

Thank you for your continuing partnership in this important development sector.

Sincerely,

A handwritten signature in black ink that reads "Matthew Courtad". The signature is written in a cursive style with a large, looping initial 'M'.

Matthew Courtad
Contracting & Agreements Officer

List of Attachments:

- A. Statement of Objectives: Securing Water Supply in the Context of Climate Change

“SECURING WATER SUPPLY IN THE CONTEXT OF CLIMATE CHANGE” PROJECT

STATEMENT OF OBJECTIVES

1. INTRODUCTION

This Statement of Objectives (SOO) describes the objectives of the U.S. Agency for International Development in Peru (USAID/Peru) for a project that will address water security in the context of climate change adaptation. This SOO is provided in lieu of a U.S. Government written Statement of Work (SOW) or Program Description (PD) to allow potential offerors the flexibility to develop cost effective solutions and the opportunity to propose innovative approaches to meet the stated Objectives. It also presents USAID/Peru with an opportunity to assess potential offerors’ understanding of all aspects of the effort to be performed by eliminating detailed instructions on how to accomplish the stated Objectives and Illustrative Results.

Offerors are invited to provide responses that include information, opinions, strategies and recommendations that present approaches for the implementation of a contemplative activity to address water security in the context of climate change..

2. PURPOSE OF THE PROJECT

This project, in collaboration with the Government of Peru (GOP), will secure water supply for urban populations, agriculture and other productive sectors vulnerable to climate change impacts to Andean hydrology. As an adaptation strategy to safeguard the ecosystem service of water regulation, the project will scale up investments in green infrastructure in watersheds¹. This will be achieved by promoting evidence-based decision making for water resources management; improving the enabling environment in terms of governance, planning, and financing green infrastructure; and supporting the design and implementation of green infrastructure model projects to be replicated in vulnerable watersheds. This project will complement the gray² infrastructure already being planned in Peru with investments in green infrastructure and watershed management for a robust strategy to respond to climate change threats to water supply in Peru. The project will work in close collaboration with the Peruvian National Water Authority (ANA), Superintendent of Water and Sanitation Services (SUNASS), Ministry of Economy and Finance (MEF), Ministry of Environment (MINAM) and other key actors such as local and regional governments, watershed councils and water utilities amongst other stakeholders.

3. BACKGROUND

The high-elevation tropical Andes of Peru is anticipated to be one of the most severely impacted regions globally to climate change. Climate change in Peru will manifest itself primarily through changes in the water cycle. Shifting temperature patterns result in accelerated glacier loss and drying out of Andean grassland and wetland ecosystems. Furthermore, changes in precipitation

¹ Green infrastructure for water includes the protection and restoration of natural watershed ecosystems as well as additional interventions that enhance the benefits nature provide.

² By gray infrastructure we understand conventional, built infrastructure (e.g. dams, wastewater treatment plans, large projects to divert water from other watersheds etc).

patterns result in a shorter and more intense raining season and a longer dry season, leading to more frequent extreme events like floods and severe droughts. Climate stressors coupled with human induced degradation reduce the hydrological regulation function provided by glaciers and Andean ecosystems. This results in diminished dry season base flow and increased risks of floods, affecting highly vulnerable agriculture-based livelihoods, concentrated urban populations, and productive sectors of the economy.

Water resources management (WRM) interventions in the form of conventional, built infrastructure (gray infrastructure) like reservoirs and water diversions, can help close the gap between water supply and demand and reduce dry season water deficit. However, restoration of the ecosystem services that watersheds provide, principally the hydrological regulation function, can contribute to water resources management by serving as a buffer to capture and slowly release water. The ecosystems that provide the water regulating services (forest, grasslands and wetlands) are under increased anthropogenic pressure. In the high Andes, overgrazing, deforestation, expansion of the agricultural frontier, among other activities are continuing to degrade vegetation cover and soil quality, thereby losing the natural water retention-release capacity of the ecosystem. Investments in watersheds oriented to conserving and restoring ecosystems and the ecosystem services they provide are crucial to safeguard water supply in the long term.

The first steps are being taken by GOP to complement the traditional gray infrastructure for water supply and regulation with investments in green infrastructure. SUNASS has been given the faculty to authorize water utilities to destine a percentage of the water tariff to payment for ecosystem services mechanisms (green investments), and several water utilities have already incorporated green investments projects into their five-year operational plans. The Payment for Ecosystem Services Law (2014) promotes and regulates payment for ecosystem services schemes, and in 2015 MEF and MINAM have published guidelines to promote public investment projects for restoration of ecosystems and ecosystem services, prioritizing hydrological regulation and control of soil erosion.

Despite the first promising steps, green interventions in watersheds for hydrological regulation in Peru are still in its infancy and there is a need to mobilize relevant GOP stakeholders around a common objective of watershed investments and take away barriers to unlock public and private financing and to design and implement good models to effectively scale up investments in green infrastructure in watersheds as an adaptation strategy to regulate water supply.

4. OBJECTIVES OF THE PROJECT

Objective 1: Improve evidence-based decision making for water resources management (WRM) plans and green infrastructure project design and implementation

The changing climate factors and their impact on the mountain ecosystems are expected to fundamentally alter the hydrologic regime resulting in more erratic and variable water flows. In order to develop water resources management plans that adapt to changing climate factors,

decision makers require improved access to climate and hydrological data. In Peru, water resources management and needed climate and hydrological data are managed by disparate entities and data are not always easily available at the sub-national level. Even where data is available, the decision makers that need to use this data often require capacity building in order to effectively use these data in water resources planning and green intervention design. A key research question may include ecological modeling to better understand the water regulating capacity of Andean ecosystems under changing climate conditions.

In addition, the value of natural ecosystems in the provision of hydrological regulation services in Peru is not well understood, and therefore the ecosystems are not valued for their potential to secure water supply in dry seasons. The evidence base on the cost effectiveness of green interventions in watersheds is growing. However, quantitative data on their hydrological benefits and costs are still scarce in Peru. This is reflected in the little attention for conservation and restoration of ecosystem services in planning documents such as the national water resources plan and the watershed management plans. Government institutes, universities and research institutes and civil society organizations should have improved capacity to generate relevant and reliable climate and hydrological data for WRM decision making in general, and specifically for generating and systematizing data on the hydrological services that ecosystems within watersheds provide and the potential for green interventions to conserve and/or restore those ecosystem services for planning and decision making purposes. Furthermore, more empirical data should be generated to strengthen the evidence base on hydrological benefits of green interventions in Andean watersheds and cost-effectiveness compared to conventional gray infrastructure. These data should be easily available and applicable by researchers, policy makers and project formulators. Hydrological monitoring methodologies for standardized data collection and reporting should be institutionalized.

Illustrative results:

- Relevant actors generate useful and reliable data for WRM decision making and design and implementation of green interventions.
- Decision makers will have improved access to climate and hydrological data.
- Information exchange platforms for collaboration and data sharing are institutionalized

Objective 2: Improve the enabling environment for watershed conservation planning and investment in green infrastructure

The evidence base on the cost effectiveness of green interventions in watersheds is growing, but little known among water management decision makers. This contributes to the low political will for green investments. The public and political awareness on the importance of watershed conservation and green infrastructure to protect and restore hydrological ecosystem services and the need for investments should be increased.

The Water Resources Law (2009) gives ANA the mandate for integrated, participative, basin-scale WRM. At basin level, several river basin councils have been established and the

councils have as their principal mandate the elaboration and implementation of the water resources management plans. Those plans would be the ideal starting point for planning green interventions. It is important that water resources management plans are aligned with the development plans and the land use planning instruments at the regional and local level. Beside intervening at the geographical scope of river basin councils and the water resources management plans, other levels of intervention should also be considered. This would acknowledge the fact that only six river basin councils have been established in Peru to date, and that some actors within GOP, such as SUNASS, are ahead of the rest of the field when it comes to promoting and financing investments in green infrastructure. Also, since the water resources plans are binding, but require finance for implementation, green interventions within the regional basin may be designed and financed by interested municipal governments using public funds such as through the National Public Investment System (SNIP). Advancements have been made by the MEF developing guidelines for “green” Public Investment Projects (PIPs verdes), but technical instructions and case studies are needed to support the priority area of hydrologic ecosystem services projects. In addition, within priority basins, potential for green interventions in smaller catchments providing water to cities (water utilities), agricultural (agro-industries as well as medium-sized farmers organized in irrigation boards and committees) and industrial (e.g. beverage, hydropower and mining industry) water users should also be addressed. Those water users could be beneficiaries of payment for ecosystem services or be part of other financial mechanisms or receive incentives for investments in watershed conservation which is an opportunity the water resources law offers but needs to be operationalized. Lastly, private sources of investment such as tax offset projects (obras por impuestos), and “greening” of gray infrastructure through requirements and technical approaches to include water source conservation as part of new dams and water transfer projects that are being promoted by ProInversion should be considered.

Illustrative results:

- Political and public awareness increased on the need for investment in green infrastructure for water supply
- The GOP (ANA, SUNASS, MEF, MINAM, regional/local governments, watershed councils, water utilities etc) is committed to investing in green infrastructure; a green infrastructure scale up plan is approved
- Water resources management plans optimize use of green and gray infrastructure
- Diverse financial mechanisms and incentives (public and private) for investment in green infrastructure operationalized

Objective 3: Implement and replicate green infrastructure models in vulnerable watersheds

The scaling up of investments in green infrastructure in watersheds to secure water supply can only be reached when theory is put in practice by creating successful model projects that can be replicated throughout the country. Ideally, a range of financial instruments will be used to finance green interventions to create successful precedents that can catalyze replication of the models in

other locations. It is important that the bottleneck of low capacity among public and private actors to access the wide range of financial instruments for green investments should be addressed. Systematic and sustainable approaches to disseminate and train project developers on green project design could use diploma programs in collaboration with universities. Model projects should be used as official case studies acceptable to MEF and MINAM in order to contribute to the body of official guidance and instructions issued by these actors. A key constraint to overcome to advance with green investments is how to make quantitative estimates of the hydrologic benefits of ecosystem services projects in sites where historical climate and hydrological data are lacking.

The different types of green intervention models implemented (for example reforestation, restoration of ancestral diversion channels for water infiltration, wetland restoration, infiltration ditches and grassland conservation) should be monitored to strengthen the evidence base on hydrological benefits of green interventions and cost-effectiveness compared to conventional gray infrastructure.

Finally, while a series of on-the-ground models in priority watershed should be implemented, in order to have national-scale impact, a strategy for replication and scaling-up of successful interventions is required.

Illustrative results:

- Improved capacity of project formulators and evaluators to access funding and design green infrastructure projects
- Green infrastructure projects designed and financed by public or private funds
- Green infrastructure projects to regulate water implemented
- Hydrological benefits and cost effectiveness of green infrastructure monitored, evaluated and systematized; evidence base of cost effectiveness of investments in green infrastructure improved

5. Other Information

In order to achieve the project purpose of climate-resilient water supply, the project will demonstrate models of green interventions in targeted watersheds that are anticipated to be most affected by changes to the hydrologic regime due to climate change. Criteria for prioritization include 1) vulnerability to climate change (physical exposure or dependence on surface water run-off regulated by glaciers and highland ecosystems and severity of negative effects on the people, places, and livelihoods and sectors most sensitive to impacts on the Andean hydrology), 2) potential for multiple levels of government and various actors to be involved in development of a diverse typology of green intervention models (basin, local government, water utility, private sector), 3) opportunities for successful implementation of on-the-ground models that can start to show hydrologic benefits during the life of the project.

The place of performance for this project will be Peru and the envisioned length of the project is five years. Offerors are invited to propose specific locations where the project could operate

beside national level activities. These locations could be river basin(s) that conform a watershed council, or a future council, and/or other (sub)basins and/or political administrative territories such as regions, provinces and/or districts.

USAID/Peru has not made a determination yet as to whether any follow-on announcement will be in the form of a Request for Proposals (RFP), indicating a contract vehicle, or a Request for Applications (RFA), indicating a cooperative agreement or grant. The estimated budget for any potential activity will be between \$15 and \$20 million dollars.