



USAID IUWASH Tangguh

USAID INDONESIA URBAN RESILIENT WATER, SANITATION, AND HYGIENE (IUWASH TANGGUH)

# PROJECT YEAR I WORK PLAN

JULY 01, 2022

# USAID INDONESIA URBAN RESILIENT WATER, SANITATION, AND HYGIENE (IUWASH TANGGUH)

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JULY 02, 2022

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### **ACRONYMS**

Akatirta Akademi Tirta Wiyata/Tirta Wiyata Environmental Engineering Academy

**AMELP** Activity Monitoring, Evaluation & Learning Plan

**APBD** Anggaran Pendapatan dan Belanja Daerah/Local Government Budget **APBN** Anggaran Pendapatan dan Belanja Negara/National Government Budget **APEKSI** Asosiasi Pemerintah Kota Seluruh Indonesia/Association of Indonesian

Municipalities

**APIK** USAID Indonesia Climate Change Adaptation and Resilience Project

APR **Annual Progress Reports** 

**AWP** Annual Work Plan

Bappeda Badan Perencanaan dan Pembangunan Daerah/Regional Development

Planning Agency

Badan Perencanaan dan Pembangunan Nasional/National Development **Bappenas** 

Planning Agency

**BAST** Berita Acara Serah Terima

B40 Bottom 40 percent of the population in terms of wealth

**BDCF** Bilateral Development Cooperation Framework

**BLUD** Badan Layanan Umum Daerah/Regional Public Service Agency

**BMKG** Badan Meteorologi, Klimatologi, dan Geofisika/ Meteorology, Climatology,

and Geophysical Agency

**BPDAS** Balai Pengelolaan Daerah Aliran Sungai/Watershed Management Office

**BPS** Badan Pusat Statistik/Statistics Indonesia

**BTAM** Balai Teknologi Air Minum/Agency for Water Technology

Balai Teknik Sanitasi/Sanitation Technical Center BTS

**BUMD** Badan Usaha Milik Daerah/Regional-owned Enterprises **BUMDes** Badan Usaha Milik Desa/Village-owned Enterprises **BWS** Balai Wilayah Sungai/River Management Authority

Catex Categorical Exclusion

**CDCS** Country Development Cooperation Strategy

CFR Code of Federal Regulations

CO Contracting Officer COE Center of Excellence

COP Chief of Party

**CPMU** Central Project Management Unit

**CTPS** Cuci Tangan Pakai Sabun/Handwashing with Soap

CSO Civil Society Organization

**CWIS** Climate and Weather Information System

**CSR** Corporate Social Responsibility

DAI DAI Global, LLC.

DAS Daerah Aliran Sungai/Watershed DCOP Deputy Chief of Party

DFAT Australian Department of Foreign Affairs and Trade
Dit. AM Direktorat Air Minum/ Water Supply Directorate

EE Energy Efficiency

**FOM** 

EMMP Environmental Mitigation and Monitoring Plan

FAS Field Accounting System
FCR Full Cost Recovery
FGD Focus Group Discussion

FORKALIM Asosiasi Pengelola Air Limbah Domestik/Association of Domestic

Wastewater Operators

Field Operation Manual

GESI Gender Equality and Social Inclusion
GIA Grant Implementation Agreement

GIS/MIS Geographical Information System/Management Information System

Godex Governance Index

GOI Government of Indonesia

GRBP Gender Responsive Budgeting and Planning

HAKLI Himpunan Ahli Kesehatan Lingkungan Indonesia/Indonesian Association of

Environmental Health

HO Home Office

IATPI Ikatan Ahli Teknik Penyehatan dan Teknik Lingkungan Indonesia/Association

of Sanitary and Environmental Engineering Indonesia

IE Impact Evaluation

IEC Information, Education, and Communication

IEE Initial Environmental Examination

IPLT Instalasi Pengolahan Lumpur Tinja/Septage Treatment Plant (STP)

IRIS Integrated Resilient IUWASH Systems

IT Information Technology

IUWASH Indonesia Water, Sanitation and Hygiene

IUWASH PLUS IUWASH Penyehatan Lingkungan untuk Semua

IUWASH Tangguh Indonesia Urban Resilient Water, Sanitation, and Hygiene

KIAT Kemitraan Indonesia Australia untuk Infrastruktur/Indonesia Australia

Partnership for Infrastructure

KLHK Ministry of Environment and Forestry

Kominfo Ministry of Communication and Information Technology

KPI Key Performance Indicators

LOA Life of Activity
LOP Life of Project

LLTT Layanan Lumpur Tinja Terjadwal/Regular Desludging Service

LTTA Long-Term Technical Assistance

M&E Monitoring and Evaluation

**MABR** Ministry of Administrative and Bureaucratic Reform **MCIT** Ministry of Communication and Information Technology

**MCIO** Microsoft Cloud Infrastructure and Operations

MEL Monitoring, Evaluation & Learning

MFI Microfinance Institution MOF Ministry of Finance MOH Ministry of Health

MOHA Ministry of Home Affairs

MOU Memorandum of Understanding

MPWH/MoPWH Ministry of Public Works and Housing

**MWECP** Ministry of Women Empowerment and Child Protection

NGO Non-Governmental Organization

NRW Non-revenue Water

**NUWSP** World Bank National Urban Water Supply Project

**PDAM** Perusahaan Daerah Air Minum/Municipal Drinking Water Company

**PANRB** Ministry of Administrative and Bureaucratic Reform

**PBG-NUWSP** Performance Based Grant-National Urban Water Supply Project **PERBAMIDA** Perhimpunan Bank Perkreditan Rakyat Milik Pemerintah Daerah se-

Indonesia/Association of Local Government-owned Rural Banks in

Indonesia

**PERPAMSI** National Association Of Water Utilities

PIF Partnership and Innovation Fund

**PIRS** Performance Indicator Reference Sheet

PPP Public Private Partnership

**PSDA** Pengelolaan Sumber Daya Air/Water Resource Management

**PSE** Private Sector Engagement PTIN Project Task ID Number

**PLJPR** Pekerjaan Umum dan Perumahan Rakyat/Public Works and Housing

**PWS** Program Work Statement PYI, PY2 Project Year I, Project Year 2 QPR Quarterly Progress Reports

**RKAP** Rencana Kerja dan Anggaran Perusahaan/Company Work Plan and Budget

**RKT** Rencana Kerja Tahunan/Annual Work Plan

**RPAM** Rencana Pengamanan Air Minum/Water Safety Plan

**RPJMN** Rencana Pembangunan Jangka Menengah Nasional/National Medium Term

Development Plan

**RPIMD** Rencana Pembangunan Jangka Menengah Daerah/Regional Medium Term

Development Plan

Sanitation Index Sandex

**SBC** Social and Behavior Change SDG Sustainable Development Goal

SIMAVI Steun in Medische Aangelegenheden Voor Inheemsen/Medical Aid for

Indigenous Affairs (a Netherlands Development Organization)

**SKAM RT** Studi Kualitas Air Minum Rumah Tangga/Study on the Households Water

Quality

SNV Stichting Nederlandse Vrijwilligers/Netherlands Development Organization

SOP Standard Operating Procedure

SOW Scope of Work

**SPAM** Sistem Penyediaan Air Minum/Water Supply System SPM Standar Pelayanan Minimum/Minimum Service Standards

**STTA** Short-Term Technical Assistance

SUPD II Sinkronisasi Urusan Pemerintahan Daerah II/Local Government Affairs

Synchronization II

Susenas Survei Sosial Ekonomi Nasional/National Socio-economic Survey **TAMIS** Technical and Administrative Management Information System

**TOCO** Task Order Contracting Officer

**TOCOR** Task Order Contracting Officer's Representative

TOT Training of Trainers

TPB Tujuan Pembangunan Berkelanjutan/ Sustainable Development Goal

UNICEF United Nations International Children's Emergency Fund

**UPTD** Unit Pelaksana Teknis Daerah/Regional Technical Implementing Unit

US **United States** 

USG United States Government

**USAID** United States Agency for International Development

**USAID SEGAR** USAID Sustainable Environmental Governance Across Regions

**UWASSH** Urban Water, Sanitation, Solid Waste and Hygiene (GIA UWASSH)

Value Added Tax VAT

WASH Water, Sanitation, and Hygiene WJDB West Java, DKI Jakarta, Banten WQQ Water Quality and Quantity **WRM** Water Resource Management

**YPCII** Yayasan Pembangunan Citra Insan Indonesia/a non-profit organization

aiming at advancing people's lives in health, education, economy and the

environment

ZAM Zona Air Minum/ Drinking Water Service Area **ZAMP** Zona Air Minum Prima/Prime Drinking Water Zone

## **EXECUTIVE SUMMARY**

## RINGKASAN EKSEKUTIF

In accordance with Section F.5.6 of Task Order Number 72049722N00001, the following document serves as the first Annual Work Plan (AWP) of the USAID Indonesia Urban Resilient Water, Sanitation, and Hygiene (IUWASH Tangguh) project. This AWP covers the period of April 04, 2022 through September 30, 2022, which is referred to as Project Year I (PYI).

USAID Indonesia Urban Resilient Water, Sanitation, and Hygiene (USAID IUWASH Tangguh) is a five-year project to advance Indonesia's development goals in increasing access to safely managed drinking water, sanitation and hygiene (WASH) in vulnerable urban areas and strengthening climate-resilient WASH services and water resources management. In close partnership with the Government of Indonesia (GOI), USAID IUWASH Tangguh supports Indonesia's work to achieve its Sustainable Development Goal (SDG) targets to ensure access to water and sanitation for all (SDG 6) and to make cities and settlements inclusive, safe, resilient, and sustainable (SDG 11).

USAID IUWASH Tangguh is implemented under USAID-Bappenas Grant Implementation Agreement (GIA) Urban Water, Sanitation, Solid Waste and Hygiene (UWASSH), signed on 30 December 2020. GIA UWASSH supports the Intermediate Result 3.2 Urban Environmental Management Strengthened of DO 3 Environmental Sustainability Improved of the **USAID-GOI** Bilateral Development Cooperation Framework (BDCF) 2020-2025 with Country Development Cooperation Strategy "Indonesia is an advanced, just, prosperous and self-reliant Indo-Pacific partner.

Using an Integrated Resilient IUWASH Systems (IRIS) approach—which aligns actions and incentives between upstream and downstream

Sesuai dengan Section F.5.6 Task Order No. 72049722N00001, dokumen berikut merupakan Rencana Kerja Tahunan (AWP) pertama proyek USAID Indonesia Urban Resilient Water, Sanitation, and Hygiene (IUWASH Tangguh). AWP ini mencakup periode 04 April 2022 hingga 30 September 2022, yang disebut sebagai Tahun Pertama Pelaksanaan Proyek (PYI).

USAID Indonesia Urban Resilient Water, Sanitation, and Hygiene (IUWASH Tangguh) adalah proyek lima tahun untuk mempercepat pencapaian tujuan pembangunan Indonesia dalam meningkatkan akses air minum dan sanitasi aman, serta perilaku higiene (WASH) di daerah perkotaan yang rentan dan memperkuat layanan WASH dan pengelolaan sumber daya air (PSDA) yang berketahanan iklim. Bermitra dengan Pemerintah Indonesia, USAID IUWASH Tangguh mendukung upaya Indonesia untuk mencapai target Tujuan Pembangunan Berkelanjutan (TPB) untuk memastikan akses air dan sanitasi untuk semua (Tujuan 6) dan menciptakan kota dan permukiman yang inklusif, aman, tangguh, dan berkelanjutan (Tujuan 11)

USAID IUWASH Tangguh dilaksanakan di bawah payung Perjanjian Pelaksanaan Hibah USAID-Bappenas Program Air Minum, Sanitasi, Persampahan dan Higiene di Perkotaan atau Grant Implementation Agreement (GIA) Urban Water, Sanitation, Solid Waste and Hygiene (UWASSH) yang ditandatangani tanggal 30 Desember 2020. GIA UWASSH mendukung Hasil Antara 3.2 Tata Kelola Lingkungan Perkotaan yang Meningkat dari Tujuan Pembangunan 3 Keberlanjutan Lingkungan Hidup Meningkat dari Payung Kerja Sama Bilateral USAID dan Pemerintah Indonesia dengan tujuan mencapai "Indonesia adalah mitra Indo-Pasifik yang maju, adil, makmur dan mandiri".

Menggunakan pendekatan Sistem USAID IUWASH Tangguh Terintegrasi (IRIS/Integrated Resilient IUWASH Systems)—yang menyelaraskan actors, while crowding in collaboration with key stakeholders through partnerships that accelerate the enabling environment and key enabling factors, such as finance and data—the USAID IUWASH Tangguh team will provide technical assistance to GOI, private sector and civil society stakeholders to achieve four objectives: 1) Strengthened WASH and WRM Sector Governance and Financing; 2) Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services; 3) Improved Water Resources Management to Support Resilient Drinking Water Services; and 4) Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements of WASH and WRM.

Through partnerships, finance, and data, the USAID IUWASH Tangguh project will help at least 1.5 million people access safely managed drinking water and at least one million people gain access to safe sanitation services.

The USAID IUWASH Tangguh team is excited to present its life of activity (LOA) and project year one work plan, building on multiple legacy USAID-funded WASH projects. In the pages that follow we present the USAID IUWASH Tangguh plan for initiating work across 39 work sites—building on the work of USAID IUWASH PLUS while also introducing new objectives and tasks focused on water resources management, climate change resilience, and a renewed focus on WASH financing. PY I will consist mostly of completing technical and operational start-up tasks, initiating coordination with the team leading an impact evaluation of USAID IUWASH Tangguh, and reinvigorating existing and beginning new relationships with partner WASH institutions, local and provincial governments, and national ministries. Crosscutting themes—intentionally targeting B40 households, incorporating gender and social equity (GESI) issues, and ensuring local ownership and sustainability—are interwoven

tindakan dan insentif antara pelaku hulu dan hilir, bekerja sama dengan para pemangku kepentingan utama melalui kemitraan yang memperlancar lingkungan pendukung dan faktor pendukung utama, seperti keuangan dan data tim USAID IUWASH Tangguh akan memberikan bantuan teknis kepada Pemerintah Indonesia, sektor swasta, dan pemangku kepentingan masyarakat untuk mencapai empat tujuan: 1) Penguatan Tata Kelola dan Pembiayaan Sektor WASH dan PSDA; 2) Peningkatan Akses Layanan Air Minum dan Sanitasi yang Aman, Berketahanan Iklim, dan Inklusif Masyarakat Miskin; 3) Peningkatan Pengelolaan Sumber Daya Air untuk Mendukung Layanan Air Minum yang Tangguh; dan 4) Peningkatan Adopsi Perilaku dan Peningkatan Partisipasi dan Peran Kepemimpinan Perempuan yang Berkontribusi pada Peningkatan WASH dan PSDA.

Melalui kemitraan, pembiayaan, dan data, proyek USAID IUWASH Tangguh akan membantu setidaknya 1,5 juta orang mendapatkan akses air minum aman dan setidaknya satu juta orang mendapatkan akses layanan sanitasi aman

Tim USAID IUWASH Tangguh dengan semangat mempresentasikan program aktivitas (LOA) dan rencana kerja tahun pertama proyek, yang dikembangkan dari legasi beberapa proyek WASH yang didanai USAID. Di halaman berikutnya kami menyajikan rencana USAID IUWASH Tangguh untuk memulai pekerjaan di 39 lokasi kerja yang dikembangkan dari pekerjaan USAID IUWASH PLUS sambil juga memperkenalkan tujuan dan tugas baru yang berfokus pada pengelolaan sumber daya air, ketahanan terhadap perubahan iklim, dan pembaruan fokus pada pembiayaan WASH. PYI sebagian besar akan menyelesaikan kegiatan awal teknis dan operasional, memulai koordinasi dengan tim yang melakukan evaluasi dampak USAID IUWASH Tangguh, dan menghidupkan kembali hubungan baru dan yang sudah ada dengan mitra lembaga WASH, pemerintah daerah dan provinsi, dan kementerian di tingkat nasional. Tema lintas sektoral diarahkan untuk menargetkan rumah tangga B40, memasukkan

across all objectives and tasks. At the time of this submission, the USAID IUWASH Tangguh team has already held discussions on collaboration with USAID and other donor projects, GOI counterparts under Technical Team/ Implementing Agencies WASH of GIA UWASSH with Bappenas as the coordinator of Implementing Agencies, and potential private sector collaborators.

## **Objective Overview**

Below we provide brief highlights of the foundational activities presented in further detail in Section 3, which provides a more detailed description of tasks.

# Objective I - Strengthened WASH and **WRM Sector Governance and Financing**

Among USAID IUWASH Tangguh's most ambitious targets is the expected outcome of leveraging US\$300 million for safe water and sanitation service improvements. Partnering with Planet Partnerships, the team has started identifying potential funding sources and pipeline development. In PYI, the team will work with local governments and WASH institutions to build-out a pipeline of investable projects and potential funding sources. Simultaneously, the team will enhance capabilities of local WASH institutions to develop historical financial analyses, identify funding opportunities through annual LG budget data (APBD) tracking, and continuously monitor finances.

In Year I, the team will also lay the groundwork for enhanced local WASH governance starting with an analysis of policy opportunities based on the work of USAID IUWASH PLUS. In collaboration with the Objective 2 team, the governance lead will begin the revision of WASH indices (GODEX, SANDEX, and PDAM index) adding in WRM and GESI parameters. This will serve as important baseline data, while also identifying areas for capacity development,

isu kesetaraan gender dan sosial (GESI), dan memastikan kepemilikan lokal dan keberlanjutan yang terjalin di semua tujuan dan tugas. Pada saat penyerahan ini, tim USAID IUWASH Tangguh telah mengadakan diskusi mengenai kolaborasi dengan proyek USAID dan donor lainnya, mitra Pemerintah Indonesia di bawah Tim Teknis WASH, GIA UWASSH dengan Bappenas sebagai koordinator Tim Teknis/ Instansi Pelaksana, dan mitra sektor swasta yang potensial.

## Ikhtisar Tujuan

Di bawah ini kami memberikan sorotan singkat dari kegiatan dasar yang disajikan secara lebih detail di Bagian 3, yang memberikan deskripsi tugas yang lebih rinci.

# Tujuan I - Penguatan Tata Kelola dan Pembiayaan Sektor WASH dan PSDA

Di antara target USAID IUWASH Tangguh yang paling ambisius adalah hasil yang diharapkan terdorongnya investasi senilai US\$300 juta untuk peningkatan layanan air dan sanitasi aman. Dengan mitra Planet Partnerships, tim telah mulai mengidentifikasi sumber pendanaan potensial dan penyusunan daftar proyek (pipeline). Di PYI tim akan bekerja dengan pemerintah daerah dan lembaga WASH untuk membangun daftar proyek yang dapat diinvestasikan dan sumber pendanaan yang potensial. Secara bersamaan, tim akan meningkatkan kemampuan institusi lokal sektor air minum dan sanitasi untuk menyusun analisis keuangan historis, mengidentifikasi peluang pendanaan melalui pelacakan data anggaran tahunan pemda (APBD), dan terus melakukan monitoring aspek keuangan daerah.

Di tahun pertama, tim juga akan membangun pondasi dasar untuk meningkatkan tata kelola WASH di tingkatan pemerintah daerah yang dimulai dengan analisis untuk melihat kebutuhan sebuah peraturan atau kebijakan berdasarkan kerja USAID IUWASH PLUS. Bekerja sama dengan tim Objective 2, governance lead akan memulai revisi indeks WASH (GODEX, SANDEX, dan indeks PDAM) dengan menambahkan parameter PSDA dan GESI. Ini

policy strengthening, and verifying the classification of 'sick' and 'healthy' PDAMs. The national coordinator for capacity development will use this information as the basis for identification and development of a water and sanitation sector training center and curricula, and push for the adoption of simplified indices by GOI institutions.

# Objective 2a - Increased Access to Poor-Inclusive, Climate-Resilient, Safely **Managed Drinking Water Services**

In order to achieve the high-level target of bringing safely managed drinking water to 1.5 million people, the Water Supply Lead will collaborate with MPWH, PERPAMSI, and MPWH's Directorate of Water Supply to develop a life of activity plan that in line with GOI program and foster agreements on locations for PDAM ZAMP and RPAM, including budget allocation plans and potential forms of collaboration. In collaboration with the national governance coordinator and WASH finance lead, the Water Supply team will update PDAM index tools as the basis for monitoring systems. For long-term sustainability, USAID IUWASH Tangguh will initiate work for its workforce development program linking to the PDAM/BUMD Capacity Building Roadmap.

New in USAID IUWASH Tangguh will be the integration with Objective 3 to improve upstream water resources management, ensuring that water suppliers understand the water resources they require and the ability of natural systems to supply water not just for spring sources, but also from aquifers, as well as surface water including streams and rivers.

akan menjadi data dasar yang penting, sekaligus mengidentifikasi area untuk pengembangan kapasitas, penguatan kebijakan, dan memverifikasi klasifikasi PDAM 'sakit' dan 'sehat'. Koordinator Nasional untuk Pengembangan Kapasitas akan menggunakan informasi ini sebagai dasar untuk identifikasi dan pengembangan pusat pelatihan dan kurikulum sektor air dan sanitasi, dan mendorong lembaga pemerintah untuk mengadopsi penyederhanaan indeks.

# Tujuan 2a – Peningkatan Akses Inklusif Bagi Masyarakat MBR, Berketangguhan Iklim dan Layanan Air Minum Aman

Untuk mencapai target tingkat tinggi untuk menyediakan akses air minum aman kepada 1.5 juta orang, Water Supply Lead akan mengembangkan rencana kegiatan proyek bekerja sama dengan Kementerian PUPR, PERPAMSI, dan Direktorat Air Minum PUPR untuk menyiapkan program kegiatan lima tahun yang disesuaikan dengan program Pemerintah Indonesiadan kesepakatan lokasi ZAMP (zona air minum prima) PDAM dan RPAM, termasuk rencana alokasi anggaran dan potensi bentuk kerja sama. Bekerja sama dengan koordinator nasional untuk tata kelola WASH finance lead, tim Air Minum akan memperbarui alat indeks PDAM sebagai dasar untuk sistem pemantauan. Untuk keberlanjutan jangka panjang, USAID IUWASH Tangguh akan memulai pekerjaan untuk program pengembangan tenaga kerja yang terkait dengan Peta Jalan Peningkatan Kapasitas PDAM/BUMD.

Kegiatan baru di USAID IUWASH Tangguh adalah integrasi dengan Tujuan 3 untuk meningkatkan pengelolaan sumber daya air di hulu, memastikan pemasok air memahami sumber daya yang mereka butuhkan dan kemampuan sistem alam untuk memasok air tidak hanya sumber mata air, tetapi juga dari akuifer, serta air permukaan termasuk aliran (sungai kecil) dan sungai.

# Objective 2b – Increased Access to Poor-Inclusive, Climate-Resilient, Safely **Managed Sanitation Services**

In PYI, USAID IUWASH Tangguh will begin activities to bring safely managed sanitation services to one million people. The sanitation lead has initiated this work by mapping municipal services against the Layanan Lumpur Tinja Terjadwal (LLTT), or Regular Desludging Service, stage for each proposed project site. In the first year, the team will help local governments review the status of sanitation performance using the sanitation index developed by USAID IUWASH PLUS. Index findings will help to inform development of a portfolio of activities including expansion of septic tank uptake, wastewater treatment investments, improved sanitation billing, and adoption of novel data systems.

USAID IUWASH Tangguh's WRM objective will link closely to sanitation services to help sanitation providers better understand and adapt to climate risk to sanitation facilities and other infrastructure.

## **Objective 3 – Water Resources Management and Climate Change**

As water resources management and climate change represent new intervention areas for USAID IUWASH Tangguh, PYI activities will focus largely on building relationships with new ministry counterparts (i.e., Ministry of Environment and Forestry), mapping institutional relationships as well as the geophysical characteristics of watersheds themselves, and identifying local WRM committees and communities to partner with. On the policy side, the Objective 3 team will analyze WRM policies and identify gaps with support of the National Governance Coordinator.

# Objective 4 - Adoption of Behaviors and Improved Women's Participation in **WASH** and **WRM**

Critical to the success of all the other objectives is increasing household demand for WASH

# Tujuan 2b – Peningkatan Akses Inklusif Bagi Masyarakat MBR, Berketangguhan Iklim dan Layanan Sanitasi Aman

Dalam PYI, USAID IUWASH Tangguh akan memulai kegiatan untuk menyediakan layanan sanitasi aman kepada satu juta orang. Sanitation Lead telah memulai pekerjaan ini dengan memetakan layanan kota/kabupaten berdasarkan tahapan LLTT untuk setiap lokasi proyek yang diusulkan. Pada tahun pertama, tim akan membantu pemerintah daerah meninjau status kinerja sanitasi dengan menggunakan indeks sanitasi dikembangkan oleh USAID IUWASH PLUS. Hasil index ini akan membantu menyiapkan portofolio kegiatan program termasuk perluasan penyerapan tangki septik, investasi pengolahan air limbah, sistem penagihan sanitasi yang lebih baik, dan penerapan system data baru.

Tujuan PSDA USAID IUWASH Tangguh akan terkait erat dengan layanan sanitasi untuk membantu penyedia layanan sanitasi lebih memahami dan beradaptasi dengan risiko iklim terhadap fasilitas dan infrastruktur sanitasi.

## Tujuan 3 - Pengelolaan Sumber Daya Air dan Perubahan Iklim

Karena pengelolaan sumber daya air dan perubahan iklim merupakan area intervensi baru untuk USAID IUWASH Tangguh, kegiatan PYI akan lebih fokus pada membangun hubungan dengan mitra kementerian baru (yaitu Kementerian Lingkungan Hidup dan Kehutanan), memetakan hubungan kelembagaan serta karakteristik geofisika DAS, dan mengidentifikasi komite dan komunitas PSDA lokal untuk bermitra. Di sisi kebijakan, tim Objective 3 akan menganalisis kebijakan PSDA dan mengidentifikasi kesenjangan dengan dukungan dari koordinator nasional untuk tata kelola.

## Tujuan 4 - Adopsi Perilaku dan Peningkatan Partisipasi Perempuan dalam WASH dan PSDA

Penting bagi keberhasilan semua tujuan lainnya adalah meningkatkan permintaan rumah tangga services and ensuring active participation of women and marginalized groups. In PYI, USAID IUWASH Tangguh's Objective 4 Lead will oversee development of the project's social and behavior change (SBC) Strategy and Action plan in close consultation with MOH. The team will identify potential hotspots for WASH and WRM interventions, targeting support to B40 households. Additionally, we will identify potential local women-led enterprises that can help provide WASH services while also increasing engagement of women and marginalized groups. Building on previous SBC initiatives, the team will continue to promote Tetangga Panutan, or 'being a good neighbor,' as the key messaging for WASH while also developing new key messages for WRM.

untuk layanan WASH dan memastikan partisipasi aktif perempuan dan kelompok marginal. Di PYI, Objective 4 Lead USAID IUWASH Tangguh akan mengawal penyusunan Strategi dan Rencana Aksi SBC proyek melalui konsultasi dengan Kemenkes. Tim akan mengidentifikasi wilayah hotspot yang berpotensi untuk mendapatkan intervensi WASH dan PSDA dengan memastikan intervensi tersebut berfokus pada perolehan manfaat bagi rumah tangga B40. Selain itu, kami akan mengidentifikasi potensi usaha lokal yang dipimpin perempuan yang dapat membantu menyediakan layanan WASH sekaligus meningkatkan keterlibatan perempuan dan kelompok marginal. Berdasarkan inisiatif SBC sebelumnya, tim akan terus mempromosikan Tetangga Panutan sebagai pesan kunci untuk WASH sambil juga mengembangkan pesan kunci baru untuk PSDA.

## I. INTRODUCTION

USAID Indonesia Urban Resilient Water, Sanitation, and Hygiene (USAID IUWASH Tangguh) is a five-year Activity to advance Indonesia's development goals in increasing access to safely managed drinking water, sanitation and hygiene (WASH) in vulnerable urban areas and strengthening climate-resilient WASH services and water resources management. In close partnership with the Government of Indonesia (GOI), USAID IUWASH Tangguh supports Indonesia's work to achieve their Sustainable Development Goal (SDG) targets to ensure access to water and sanitation for all (SDG 6) and to make cities and settlements inclusive, safe, resilient, and sustainable (SDG 11).

Using an Integrated Resilient IUWASH Systems (IRIS) approach—which aligns actions and incentives between upstream and downstream actors, while crowding in collaboration with key stakeholders through partnerships that accelerate the enabling environment and key enabling factors, such as finance and data—the USAID IUWASH Tangguh team will provide technical assistance to GOI, private sector and civil society stakeholders to achieve four objectives:

- a) Strengthened WASH and WRM Sector Governance and Financing;
- b) Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services;
- c) Improved Water Resources Management to Support Resilient Drinking Water Services; and
- d) Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements of WASH and WRM.

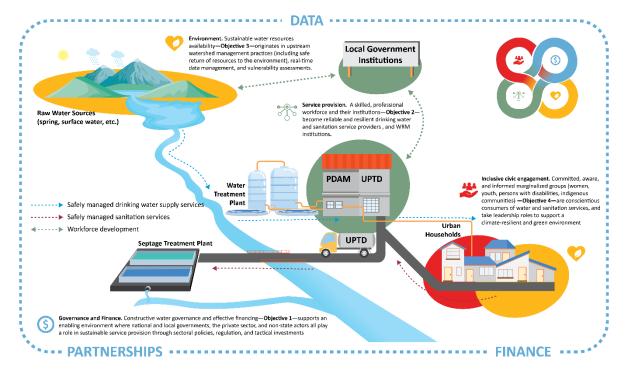


Exhibit I. Key Features of the IRIS Approach

Site selection is a critical step in USAID IUWASH Tangguh start-up to ensure the project is implemented with a view to achieving the project's targets, having impact, identifying partners with political commitment, and generating intervention packages tailored to site-specific needs.

USAID IUWASH Tangguh is implemented under USAID-Bappenas Grant Implementation Agreement (GIA) Urban Water, Sanitation, Solid Waste and Hygiene (UWASSH), signed on 30 December 2020. GIA UWASSH supports the Intermediate Result 3.2 Urban Environmental Management Strengthened of DO 3 Environmental Sustainability Improved of the USAID-GOI Bilateral Development Cooperation Framework (BDCF) 2020-2025 with Country Development Cooperation Strategy "Indonesia is an advanced, just, prosperous and self-reliant Indo-Pacific partner.

#### I.I. PURPOSE

The Annual Work Plan, referenced in section F.5.6 of the contract, guides the USAID IUWASH Tangguh team through implementation with activity level detail linked to the Project Performance Work Statement (PWS) (Section C of the contract). This work plan covers a Life of Activity (LOA) Implementation Plan and details activities for the critical start-up period of the project from contract signing on April 4, 2022 through the end of Year I on September 30, 2022.

#### 1.2. ANNUAL WORK PLAN DEVELOPMENT PROCESS

The USAID IUWASH Tangguh team prepared the LOA and YI work plan in close consultation with USAID/Indonesia, Government of Indonesia counterparts, and USAID Washington's Urban WASH Impact Evaluation team. This work plan provides an overview of the life of activity implementation plan, breaking down the sub-tasks and activities in the PWS over the life of the project, demonstrating our strategy to achieve outputs, outcomes, and impacts over the five years of the USAID IUWASH Tangguh contract.

At the time of work plan development, USAID IUWASH Tangguh has hired and onboarded all key personnel plus the Objective Leads and Regional Managers. However, regional offices have yet to be fully staffed and established. Similarly, while the team has completed initial work to identify potential program sites (see separate Site Selection report), the Government of Indonesia is still reviewing the commitments of shortlisted LGs. After the review, the GOI will release determination letters to the LG partners that will receive assistance from USAID IUWASH Tangguh. The shortlisted LGs include both former USAID IUWASH PLUS sites, and new sites which have not yet received assistance from USAID. Therefore, this work plan includes many foundational activities required to analyze gaps of both legacy and new local water supply and sanitation partners and to obtain their commitments to working with USAID IUWASH Tangguh. Subsequent work plans will include more detailed descriptions of specific activities within geographies.

**Exhibit 2. Key Work Plan Development Dates** 



### 1.3. APPROACH TO ACHIEVING USAID IUWASH TANGGUH RESULTS

In this section we highlight our approach to implementing USAID IUWASH Tangguh, including presentation of the project theory of change, discussion of the life of activity implementation plan (further detailed in the detailed task descriptions and LOA Gantt chart in Annex I), presentation of the Year I work plan, and project results framework linking to the USAID Indonesia 2020 - 2025 CDCS.

#### 1.4. THEORY OF CHANGE

The graphic below highlights the USAID IUWASH Tangguh theory of change.

**And Improves** If... Indonesia governance and expands water, financing of sanitation, municipal hygiene, and solid services and waste services water resources And if... municipal And if... governments and municipalities service providers adopt key are better behaviors that prepared to address climatereduce related shocks and vulnerability stresses, Then, cities will be more productive, healthy, and resilient.

**Exhibit 3. USAID IUWASH Tangguh Theory of Change** 

#### 1.5. LIFE OF ACTIVITY IMPLEMENTATION PLAN

The vision for USAID IUWASH Tangguh is that after five years, key stakeholders, government, private sector, communities, and women are self-reliant and equipped with the capacity, data, financing, incentives, and relationships that improve resiliency of WASH and WRM services, leading to cities that are healthy, productive, and more resilient to shocks and stresses. The high-level targets of USAID IUWASH Tangguh are:

- At least 1.5 million people access safely managed drinking water;
- At least I million people gain access to safe sanitation services;
- At least 50 public private partnerships;
- Reach at least I million people through campaigns promoting WASH and water resource management resilience; and
- Mobilize at least \$310 million in domestic, regional, and international financing.

To reach the targets above, USAID IUWASH Tangguh plans to provide different levels and types of support based on the capacity of target sites and the resources available through the project. Select cities and districts will receive 'full support' for safely-managed drinking water supply, safely-managed sanitation and water resource management (WRM) interventions. Other cities and districts—based on limited capacity, resources or needs—may only receive support for one or more of the technical areas i.e., safely-managed drinking water, safely-managed sanitation, and/or WRM. We describe each support 'scenario' below.

- a) The 'Full Support' scenario includes the following:
  - Supporting LG partners to achieve 100% coverage of safely-managed drinking water supply. USAID IUWASH Tangguh will work in cities that already have high coverage of drinking water supply through piped systems—with a focus on promoting access in poor, vulnerable and marginal communities. The USAID IUWASH Tangguh team will work with LG and water utility partners to promote access to safely-managed drinking water supply to this segment of the population.
  - Supporting full implementation of the Water Safety Plan/WSP (RPAM/Rencana Pengamanan Air Minum Aman) by applying full systemized chlorination and/or developing potable drinking water systems (ZAMP/Zona Air Minum Prima). This activity should include a strong monitoring and evaluation system to ensure the effectiveness of achieving water free from contamination across the system. This effort will be complemented by other indicators for safely-managed drinking water services, defined as a water services that are established onpremises, available when needed, and free from contamination.
  - Replication of Spring Vulnerability Assessment and Action Plans (Kajian Kerentanan Mata Air dan Rencana Aksi/KKMARA) to other springs and/or widening the climate vulnerability assessments to other raw water sources of the assisted water utilities, for example, surface water, rainfall or groundwater.
  - Support increased access and sustainability to safely-managed sanitation by supporting the expansion of regular desludging services city-wide to all the remaining un- or under-served and promoting climate resilience of existing wastewater facilities (i.e., having wastewater treatment plants that are resilient to landslides and flooding). The intervention also includes efforts to improve the wastewater institutions by transitioning authority from the Unit

Pelaksana Teknis Daerah (UPTD), or Regional Technical Implementing Unit, to Badan Layanan Umum Daerah (BLUD), or Regional Public Service Agency, or PDAM managed wastewater services—which will contribute to improved wastewater systems in the city and district.

- b) The 'Water Supply' scenario will focus on work to improve water utility performance through various interventions such as reduction of Non-Revenue Water (NRW), improving Energy Efficiency, business plan development that accommodates WRM interventions, WSP/RPAM Implementation and climate vulnerability assessments and action planning focused on the raw water sources used by the assisted water utility.
- c) The 'Sanitation' scenario will focus support on the strengthening of operations for regular desludging systems. This effort will contribute to increased access to safely managed sanitation services as detailed in the fourth bullet of the full support scenario above.
- d) The "WRM" scenario will focus on the implementation of Climate Vulnerability Assessments and Action Planning for the raw water sources used by the assisted water utilities. The raw water sources are not limited to springs but also include other sources used such as surface water, rainfall and groundwater.

For those cities/districts that do not receive the "Full Support" scenario, USAID IUWASH Tangguh could consider providing support on multiple "Scenarios" above (i.e., WRM Scenario and Sanitation Scenario, or Sanitation Scenario and Water Supply Scenario). The type of support will be based on the capacity and resources of the assisted cities and districts. Detailed initial analysis of the type of support envisioned for each of the target cities and districts is described in ANNEX 2.

The implementation of each scenario will be carried out by the technical teams throughout the life of activities (LOA) of the project. Annex I presents the LOA implementation plan in Gantt chart format. The LOA matrix gives further detail to the objectives, tasks, and sub-tasks presented in the PWS, identifies relevant indicators for each activity, assigns staff member responsibility, and identifies an implementation timeline to outline when in the life of the activity specific sub-tasks will take place.

#### I.6. YEAR I ANNUAL WORK PLAN

The Year I work plan covers the period of April 4 through September 30, 2022. Building on our start-up and mobilization plan, the USAID IUWASH Tangguh team presents below a plan to rapidly regain and leverage the foothold established under the IUWASH PLUS program in previously supported sites and to establish itself in 19 new municipalities and districts. In previously supported sites the team will differentiate itself from prior USAID WASH investments by focusing on a more interconnected upstream/downstream approach, a new emphasis on water resources management, and stronger consideration for the impacts of climate change on water supply and sanitation. While the life of activity implementation plan focuses on the broad set of activities over the life of the project, in Year I we will focus on the following themes:

- Kickstarting WASH Finance USAID IUWASH Tangguh has set ambitious targets across the activity. The ability to generate opportunities in WASH Finance underpins targets for increased safe water access, and better managed sanitation. Therefore, key to achieving targets over the life of the program will be the ability to rapidly develop a pipeline of investment opportunities matched with WASH finance;
- Finalizing Site Selection At the time of submission of this work plan, the team has made significant progress in site selection. The team has held discussions with national

stakeholders including Bappenas, MoHA, MoH, and MoPWH. Bappenas has provided its initial approval of USAID IUWASH Tangguh sites. Additionally, the team has carried out extensive data-informed analyses to identify likely high priority project objectives for each site as described in detail in our Site Selection Report. From July - September, USAID IUWASH Tangguh will focus on rolling out the project in the target locations (see the exhibit below).

Exhibit 4. USAID IUWASH Tangguh Target Geographies by the five regional offices (covering ten provinces)						
DKI Jakarta/Banten/ West Java and West Kalimantan		Central Java	South Sulawesi and Papua			
<ul> <li>Binjai city</li> <li>Deli Serdang district</li> <li>Pematang Siantar district</li> <li>Simalungun district</li> </ul>	ty • Tangerang city • S  Tangerang district • S  lang district • Tangerang Selatan city • I  DKI Jakarta province • N  Bogor district • Depok city • Pontianak city • I	<ul> <li>Surakarta city</li> <li>Sukoharjo district</li> <li>Karanganyar district</li> <li>Wonogiri district</li> <li>Sragen district</li> <li>Magelang city</li> <li>Temanggung city</li> <li>Salatiga city</li> </ul>	<ul> <li>Surabaya city</li> <li>Sidoarjo district</li> <li>Gresik district</li> <li>Malang district</li> <li>Malang city</li> <li>Batu city</li> <li>Blitar city</li> <li>Pasuruan city</li> <li>Pasuruan district</li> <li>Kupang city</li> </ul>	<ul> <li>Makassar city</li> <li>Maros district</li> <li>Gowa district</li> <li>Takalar district</li> <li>Barru district</li> <li>Jayapura city</li> <li>Jayapura district</li> </ul>		

- Collaborating to Launch the Impact Evaluation & Baseline Data Collection During the initial start-up phase, the technical team held a co-creation workshop with the Urban WASH Impact Evaluation team. In Year 1, USAID IUWASH Tangguh will coordinate with the Impact Evaluation team, including establishing systems to monitor conditions and provide context monitoring in support of the IE. This work plan (and subsequent work plans) will also be shared with the Impact Evaluation Team.
- Launching the Water Resources Management & Climate Resilience Objective In Objective 3 of the PYI work plan, we describe how we will initiate new activities in the WRM and climate resilience space. In the area of water supply, this will include assessing water catchments to delineate their boundaries and complete an inventory of water sources currently utilized by or available to water suppliers, not only from spring sources, but also from surface and other water sources. The technical team will identify and propose mitigation measures for climate risks to these water sources. In order to promote climate resilience in the sanitation sector, the team will help identify facilities and technologies that are at high risk from the impacts of climate change, introduce septic tank designs that prevent flood water contact with sludge, and help sanitation institutions identify other approaches to adapt to, or mitigate against climate risks.
- Complete Operational Start-Up The project start-up focused on quick start mobilization activities that consisted of recruiting key project staff, establishing the national office and other operations-related activities. USAID IUWASH Tangguh will complete IT system set-up and other start-up measures in Jakarta, and launch field office start-up through the remainder of PYI. Detailed start-up activities can be found in the Project Management Section and in the separate Quick Start and Mobilization Plan.

#### 1.7. WORK PLAN ORGANIZATION

Section 2: Project Results Framework - This section highlights the USAID IUWASH Tangguh results framework demonstrating how tasks and sub-tasks will lead to outputs, outcomes, and highlevel impact as measured through the MEL targets over the life of activity.

Section 3: USAID IUWASH Tangguh Technical Objectives - This section presents a detailed description of the discrete tasks and interventions for the life of project and year I, including how sub-tasks will contribute to results, outcomes, and MEL targets. Additionally, this section discusses how objectives are interrelated and how team members will ensure integration across objectives, and cross-cutting themes especially governance, capacity building, GESI, AMEL, and program communication throughout. At the end of each objective, we present a schedule of milestones to be achieved in the year and an estimated timeframe for sub-tasks. Throughout the objectives, we present discussions on opportunities to coordinate and collaborate with USAID and non-USAID stakeholders.

Section 4: Program Management - This section includes an overview of general project management, including details on opening our national and regional offices, estimated summary budgets for each task and intervention, a plan for international travel, and resources required to implement the technical program (i.e. STTA, training, other support resources). This section also includes a plan for subcontracting and how USAID IUWASH Tangguh will select subcontractors, building on the project's procurement plan.

The Year I AWP also includes the following additional information

**ANNEX I:** Detailed Life of Activity Matrix (Described above)

**ANNEX 2: USAID IUWASH Tangguh Scenario on Support to Shortlisted Locations** 

**ANNEX 3: Organizational Structure and Matrix Management Chart** 

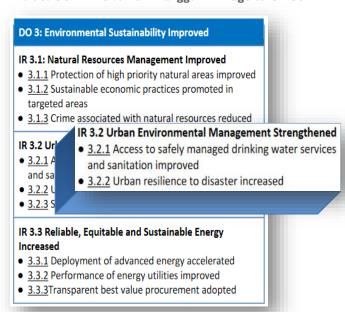
# 2. PROJECT RESULTS FRAMEWORK

In this section we present the USAID IUWASH Tangguh results framework and discuss the linkages between this framework and the USAID/Indonesia CDCS. In 2020, USAID/Indonesia adopted its new country development and cooperation strategy (CDCS) covering the period 2020-2025. USAID/Indonesia designed USAID IUWASH Tangguh in support of Development Objective 3: Environment Sustainability Improved (see Exhibit 5 below). Specifically, the activity will contribute to Sub-IRs 3.2.1 and 3.2.2 Access to safely managed drinking water services and sanitation improved and urban resilience to disaster increased.

In addition to the intermediate results, USAID IUWASH Tangguh's approach will help the Mission achieve its Journey to Self-Reliance initiatives, with a particular focus on:

- Redefining the Relationship GOI partners will be out front on USAID IUWASH Tangguh. At the national level Bappenas has already taken on a lead role in providing strategic coordination to USAID IUWASH Tangguh through start-up support for site selection and providing feedback on the overall direction of the activity;
- Financing Self-Reliance A major objective and target of USAID IUWASH Tangguh aims to leverage significant GOI and private sector resources to finance access to safely managed drinking water and sanitation;
- Private Sector Engagement USAID IUWASH Tangguh will seek private sector solutions, both as direct service suppliers, especially in the sanitation sector where the private sector plays a substantial role in service delivery, and also in WRM activities related to payment for ecosystems services, and engaging the private sector as potential investors in the water sector;
- Effective Partnering and Procurement Reform USAID IUWASH Tangguh will support the capacity building of GOI, Local Government partners and other institution partners; and, improved use of data for local solutions.

Exhibit 5. USAID IUWASH Tangguh Linkage to CDCS



The Project Monitoring, Evaluation and Learning (MEL) Program is an essential component to implementation of project activities. MEL program activities will contribute to tracking, documenting, reporting and sharing best practices in achieving progress against project output and outcomes. USAID IUWASH Tangguh places strong emphasis on program MEL to track and document the project output and outcomes though TAMIS (Technical and Administrative Management Information System), a customizable database system developed by DAI that provides a methodology and structure for organization, planning and sharing of MEL data. TAMIS allows for cost-effective data entry from multiple locations and real-time tracking of activities and results for use in project reporting and communications. The emphasis on MEL is embodied in the project's approved Activity Monitoring and Evaluation Plan (AMEP), a strategic framework for monitoring project performance vis-à-vis the project's intended results and deliverables. As stated in the USAID IUWASH PLUS AMEP, there are 23 output and outcome indicators. Among these indicators, eleven (11) indicators are USAID Standard Indicators.

#### Outputs Interventions **Outcomes** Impact Objective I: Strengthened WASH and WRM sector governance and financing Provide technical support to LGs, CSOs, and user groups to advocate for revisions of WASH/WRM • 65 new and/or revised laws, policies, . \$300 million mobilized to the water legislation regulation, or agreements in place and sanitation sectors with USG Develop financial flow tracking system and pipeline of potential WASH/WRM that promote access to improved assistance (HL.8.4-1) WASH services · 20% increase to overall budget investment opportunities • 50 PPP established with USG appropriations for WASH, WRM by Build sector capacities through support targeted local governments mentorship, training, technical • 35 social inclusion and public exchanges, and tech enhancements 100 institutions strengthened to accountability measures manage the urban environment Create/expand mechanisms to implemented promote social accountability and inclusivity Objective 2: Increased access to safely managed drinking water and sanitation services Implement workforce development 1.5 million people gaining access to framework for service providers safely managed drinking water services Assist BAPPENAS, MoPWH, and with USG assistance (HL.8.1-2) DO3 MoHA to further develop the PDAM • 5,000 WASH/WRM workers with I million people gaining access to Environmental data reporting system with datasafely managed sanitation services with USG assistance (HL.8.2-3) improved skills Stability driven KPIs, targets and definitions • 10 new financial/operational Improved ExpandWASH and WRM service 100 water and sanitation sector management tools developed by models through a consultation institutions strengthened to manage service providers Increase access process with communities and IR 3.2 water resources or improve water potential to safely Urban supply and sanitation services with Integrate data systems for use by USG assistance (HL.8.3-3) managed Environmental service providers and LGs drinking water, Management Strengthened Objective 3: Improved WRM to support climate-resilient drinking water services hygiene (WASH) in Indonesia's Conduct stakeholder consultations. vulnerable urban public-private dialogues, community outreach, and youth education to areas and • \$10 million investment mobilized managed raise awareness of climate change strengthening for climate change adaptation as · Collect data on the climate-resiliency • 60 WRM policies, guidance, and climate-resilient supported by USG assistance (EG.IIof watersheds services and programs to support resilient 4 and NRSS CC1.2) WASH services · Prepare climate resilient water drinking water services sanitation • 100 institutions with improved resource vulnerability assessments and action plans for PDAMs • 40 institutions with management improve resources capacity to assess or address climate information systems and/or data change risks supported by USG assistance (EG.11-2 and NRSS · Promote private sector investment management management tools adopted as a Sub-IR 3.2.2 to protect natural assets and invest in result of USG assistance green infrastructure CCI.I) 35 climate vulnerability assessment Implement protection measures for watershed catchment areas to disaster 300,000 people benefiting from reports produced to support increased. adoption and implementation of improvement of raw water sources Integrate GESI into WRM policies measures to improve water and budgeting of assisted PDAM resources management as a result of Collect and share WRM. USG assistance (HL.8.5.1 and NRSS ground/surface water data and O3.5)climate information · Develop climate vulnerability assessment reports Objective 4: Increased adoption of behaviors and improved women's participation & leadership roles in WASH and WRM · Implement SBC strategies targeted • 5,000 persons trained with USG to sustainable sanitation systems and assistance to advance outcomes • 30% of households with soap and payments for water and sanitation consistent with gender equality or

- services
- · Publish a gender analysis report
- · Design Inclusive WASH facilities
- · Implement strategy to accelerate women's participation and agency in WASH and WRM institutions
- Coach and train women to manage WASH facilities
- Establish GRBP regulations and KPIs
- female empowerment through their roles in public or private sector institutions or organizations (GNDR-8)
- I million people reached through SBC campaigns promoting WASH and WRM resilience
- 35 cities/districts implement improved desludging services
- water at a handwashing station commonly used by family members (HL.8.2-5)
- 20% of participants reporting increased agreement with the concept that males and females should have equal access to social, economic, and political resources and opportunities (GNDR-4)

Sub-IR 3.2.1: Access to safely drinking water

Urban resilience

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### 2.1. SUMMARY OF RESULT INDICATORS

The USAID IUWASH Tangguh team uses a total of 23 indicators to monitor the progress of each result and manage performance for each program year through the implementation of task and subtasks activities. The exhibit below provides a summary of the USAID IUWASH Tangguh task and subtasks that contribute to the indicators. The Exhibit also indicates the type of indicator, the PYI target, and the life-of-project target.

Exhibit 7. Summary of the USAID IUWASH Tangguh task and subtasks that contribute to the indicators					
INDICATOR	OBJECTIVE CONTRIBUTION BY TASK	PYI TARGET	LOA TARGET		
Objective I: Strengther	ned WASH and WRM Sector Governance and Financi	ng			
IT I-I Number of new and/or revised laws, policies, regulations, or agreements in place that promote access to improved WASH services [Custom]	s, for improved WASH/WRM processes at national and s, or local government levels e that		65		
	Task 1.1.3 Stimulate participation of diverse stakeholders in broader policy reform and enforcement initiatives agenda.				
	Task 2.2.1: Develop portfolio approaches to improving operational and financial efficiencies				
IT I-2 Number of public- private partnerships established with USAID	Task 1.2.1 Improve data flows to identify financial flows and gaps at the WASH/WRM sectoral level.	0	50		
support [Custom]	Task 1.2.2 Support financial planning and analysis at LG, PDAM, and UPTD service provider levels.				
	Task 1.2.3 Identify financing opportunities and create pipeline of WASH-/WRM-related investments				
IT I-3 Number of social inclusion and public accountability measures	Task 1.4.1 Expand mechanisms to promote social accountability and inclusivity	0	35		
implemented by supported institutions [Custom]	Task 4.1.1: Develop SBC strategies targeted to sustainable sanitation systems				
	Task 2.4.1: Support adoption of novel data systems by service providers				
IT I-4 Value of new funding mobilized to the water and sanitation	Task 1.2.1 Improve data flows to identify financial flows and gaps at the WASH/WRM sectoral level.	0	\$ 300,000,000		
sectors as a result of USG assistance [HL.8.4- I]	Task 1.2.2 Support financial planning and analysis at LG, PDAM, and UPTD service provider levels.				
	Task 1.2.3 Identify financing opportunities and create pipeline of WASH-/WRM-related investments				
IT I-5 Change in overall budget appropriations	Task 1.2.1 Improve data flows to identify financial flows and gaps at the WASH/WRM sectoral level.	0	20%		

Exhibit 7. Summary of the	USAID IUWASH Tangguh task and subtasks that contribute to		
INDICATOR	OBJECTIVE CONTRIBUTION BY TASK	PYI TARGET	LOA TARGET
for WASH and WRM by targeted local governments [Custom]	Task 1.2.2 Support financial planning and analysis at LG, PDAM, and UPTD service provider levels.		
	Task 1.2.3 Identify financing opportunities and create pipeline of WASH-/WRM-related investments		
IT I-6 Number of institutions strengthened to manage the urban environment [Custom]	Task 1.1.1 Develop and facilitate policies and regulations for improved WASH/WRM processes at national and local government levels	0	100
	Task 1.1.2 Prioritize pathways for passage and implementation of draft policy and regulations		
	Task 1.1.3 Stimulate participation of diverse stakeholders in broader policy reform and enforcement initiatives agenda.		
	Task I.2.1 Improve data flows to identify financial flows and gaps at the WASH/WRM sectoral level.		
	Task 1.2.2 Support financial planning and analysis at LG, PDAM, and UPTD service provider levels.		
	Task 1.2.3 Identify financing opportunities and create pipeline of WASH-/WRM-related investments		
	Task 2.3.1 Expand menu of service model options for PDAM and LG integration and adoption		
Objective 2: Increased A	Access to Poor-Inclusive, Climate-Resilient, Safely Mai Services	naged Drinking	Water and
IT 2-1 Number of WASH and WRM workers' skills and	Task 1.3.1 Build capacity of WASH/WRM coordination institutions	0	5,000
competencies improved as a result of USG assistance [Custom]	Task 2.1.1 Apply workforce development framework to support service providers		
T 2-2 Number of new financial/ operational and management tools	Task 2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	0	10
developed by service providers as a result of USG assistance [Custom]	Task 2.3.1 Expand menu of service model options for PDAM and LG integration and adoption		
	Task 2.4.1: Support adoption of novel data systems by service providers		
	Task 1.2.2 Support financial planning and analysis at LG, PDAM, and UPTD service provider levels.		
T 2-3 Number of people gaining access to a safely managed drinking water	Task 2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	0	1,500,000

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Exhibit 7. Summary of the	USAID IUWASH Tangguh task and subtasks that contribute to	o the indicators	
INDICATOR	OBJECTIVE CONTRIBUTION BY TASK	PYI TARGET	LOA TARGET
services as a result of USG assistance [HL.8.1-2]	Task 2.3.1 Expand menu of service model options for PDAM and LG integration and adoption		
	Task 2.4.1: Support adoption of novel data systems by service providers		
IT 2-4 Number of people receiving improved service quality from an	Task 2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	0	N/A
existing basic or safely managed drinking water service as a result of	Task 2.3.1 Expand menu of service model options for PDAM and LG integration and adoption		
USG assistance [HL.8.1-3]	Task 2.4.1: Support adoption of novel data systems by service providers		
IT 2-5 Number of people gaining access to safely managed sanitation	Task 2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	0	1,000,000
services as a result of USG assistance [HL.8.2-3]	Task 2.4.1: Support adoption of novel data systems by service providers		
IT 2-6 Number of cities/districts implementing improved	Task 2.1.1 Apply workforce development framework to support service providers	0	35
desludging services [Custom]	Task 2.2.1: Develop portfolio approaches to improving operational and financial efficiencies		
	Task 2.4.1: Support adoption of novel data systems by service providers		
	Task 4.2.1 Develop an SBC campaign for payment for water and sanitation services		
IT 2-7 Number of water and sanitation services sector institutions strengthened to manage water resources or improve water supply and sanitation services as a result of USG assistance [HL.8.3-3]	Task 2.2.1: Develop portfolio approaches to improving operational and financial efficiencies  Task 1.2.2 Support financial planning and analysis at LG, PDAM, and UPTD service provider levels.	0	100
Objective 3: Improved	Water Resources Management to Support Resilient D	rinking Water	Services
IT 3-1 Number of WRM policies, guidance, and programs to support resilient drinking water services [Custom]	Task 3.4.1: Conduct gap analysis in policies and regulations for improved watershed-level WRM  Task 3.4.2: Strengthen the enabling environment for watershed management and improve WRM capacity for upstream and downstream users	0	60
	Task 3.4.3: Ensure that climate-resilient WRM is integrated into government plans and budgets at all levels		
IT 3-2 Number of institutions with	Task 3.2.1: Establish or strengthen inclusive WRM committees including local government, private sector,	0	40

Exhibit 7. Summary of the	USAID IUWASH Tangguh task and subtasks that contribute to	the indicators	
INDICATOR	OBJECTIVE CONTRIBUTION BY TASK	PYI TARGET	LOA TARGET
management information systems and/or data management tools adopted as a result of USG assistance [Custom]	communities, and utilities  Task 3.2.2: Provide awareness-raising and training for government officials and WRM stakeholders on gender equity and inclusion, including gender-responsive budgeting		
	Task 3.2.3: Ensure that relevant WRM information and data are publicly available, including production from springs and water usage statistics		
	Task 3.3.1: In partnership with BMKG, improve quality and accessibility of climate information and promote applied messaging for WRM decision makers		
	Task 3.3.2: Provide PDAMs with a real-time groundwater and surface water monitoring information system		
	Task 3.3.3: Develop and equip a citizen scientist program to raise awareness of WASH/WRM data use and monitor water quality and quantity		
IT 3-3 Number of climate vulnerability assessment reports produced to support improvement of raw water sources of assisted PDAM [Custom]	Task 3.1.2 Map upstream water systems, downstream consumption patterns, and potential pollution sources, and prepare climate-resilient water resource vulnerability assessments and action plans	0	35
IT 3-4 Amount of investment mobilized for climate change	Task 3.4.1: Conduct gap analysis in policies and regulations for improved watershed-level WRM	0	\$ 10,000,000
adaptation as supported by USG assistance [EG.11-4]	Task 3.4.2: Strengthen the enabling environment for watershed management and improve WRM capacity for upstream and downstream users		
	Task 3.4.3: Ensure that climate-resilient WRM is integrated into government plans and budgets at all levels		
IT 3-5 Number of institutions with improved capacity to	Task 3.4.1: Conduct gap analysis in policies and regulations for improved watershed-level WRM	0	100
assess/address climate change risks supported by USG assistance [EG.11-2]	Task 3.4.2: Strengthen the enabling environment for watershed management and improve WRM capacity for upstream and downstream users		
[20 2]	Task 3.4.3: Ensure that climate-resilient WRM is integrated into government plans and budgets at all levels		
IT 3-6 Number of people benefiting from adoption and implementation of	Task 3.4.1: Conduct gap analysis in policies and regulations for improved watershed-level WRM	0	300,000
measures to improve water resources management as a result	Task 3.4.2: Strengthen the enabling environment for watershed management and improve WRM capacity for upstream and downstream users		

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Exhibit 7. Summary of the USAID IUWASH Tangguh task and subtasks that contribute to the indicators					
INDICATOR	OBJECTIVE CONTRIBUTION BY TASK	PYI TARGET	LOA TARGET		
of USG assistance [HL8.5-1]	Task 3.4.3: Ensure that climate-resilient WRM is integrated into government plans and budgets at all levels				
	Task 4.2.2 Engage different media channels, influencers, and content providers				
	Adoption of Behaviors and Improved Women's Particle Contribute to Improvements in WASH and WRM	ipation and Lea	adership		
IT 4-I Number of people reached through SBC campaigns promoting WASH and WRM resilience	Task 3.3.1: In partnership with BMKG, improve quality and accessibility of climate information and promote applied messaging for WRM decision makers  Task 3.3.3: Develop and equip a citizen scientist program to raise awareness of WASH/WRM data use and monitor water quality and quantity	0	1,000,000		
	Task 4.1.1: Develop SBC strategies targeted to sustainable sanitation systems  Task 4.1.2: Increase household demand for WASH services  Task 4.2.1 Develop an SBC campaign for payment for water and sanitation services  Task 4.2.2 Engage different media channels, influencers,				
IT 4-2 Number of persons trained with USG assistance to advance outcomes consistent with gender equality or female empowerment through their roles in public or private sector institutions or organizations [GNDR-8]	and content providers  Task 1.1.1 Develop and facilitate policies and regulations for improved WASH/WRM processes at national and local government levels  Task 1.3.1 Build capacity of WASH/WRM coordination institutions  Task 2.1.1 Apply workforce development framework to support service providers  Task 3.2.1: Establish or strengthen inclusive WRM committees including local government, private sector, communities, and utilities  Task 4.3.1 Accelerate gender integration and women's agency in WASH and WRM sectors	0	5,000		
IT 4-3 Percentage of households with soap and water at a handwashing station on premises [HL.8.2-5]	Task 4.1.1: Develop SBC strategies targeted to sustainable sanitation systems  Task 4.1.2: Increase household demand for WASH services  Task 4.2.1 Develop an SBC campaign for payment for water and sanitation services	0	30%		

Exhibit 7. Summary of the USAID IUWASH Tangguh task and subtasks that contribute to the indicators						
INDICATOR	OBJECTIVE CONTRIBUTION BY TASK	PYI TARGET	LOA TARGET			
	Task 4.2.2 Engage different media channels, influencers, and content providers					
IT 4-4 Percentage of participants reporting increased agreement with the concept that	Task I.I.I Develop and facilitate policies and regulations for improved WASH/WRM processes at national and local government levels	0	20%			
males and females should have equal access to social, economic, and	Task 1.3.1 Build capacity of WASH/WRM coordination institutions					
political resources and opportunities [GNDR-4]	Task 2.1.1 Apply workforce development framework to support service providers					
	Task 3.1.5: Build capacity of local workforce to carry out watershed management activities such as construction of infiltration wells, improved sloping land management					
	Task 3.2.1: Establish or strengthen inclusive WRM committees including local government, private sector, communities, and utilities					
	Task 4.3.1 Accelerate gender integration and women's agency in WASH and WRM sectors					

## 2.2. MONITORING, EVALUATION, LEARNING PLAN AND ACTIVITY

USAID IUWASH Tangguh Monitoring and Evaluation Program for PYI will focus on the submission of the Activity Monitoring, Evaluation and Learning Plan (AMELP) as the reference for tracking and monitoring of project results based on the target set in the USAID IUWASH Tangguh contract. The AMELP is one of the contract deliverables due within the first 90 days after award of the project. The Monitoring, Evaluation and Learning (MEL) Team will work with all objective team leads to raise awareness within the technical and regional teams of the Life of Project targets, project indicator reference sheets and MEL tools and policies. The MEL team will also launch work with objective teams on preparing the baseline survey for IT 4-4 as well as collecting database for IT 1-5 and IT 2-6. The MEL Team will also support the USAID IUWASH Tangguh Management Team's efforts to establish an MEL Data Tracking and Monitoring System.

USAID IUWASH Tangguh will hold the first annual workshop for all MEL teams in September 2022 after all regional MEL specialists are on board. This workshop will focus on disseminating detailed PIRS and developing the PY2 MEL activity plan, with focus on design and completion of baseline surveys. Detailed PY1 MEL Team activities are presented in the Exhibit below.

Exhibit 8. PY I MEL Activities									
					YEA	RITIN	1EFRA	ME	
ACTIVITY	INPUT	OUTPUTS	APR	MAY	NOC	JUL	AUG	SEP	YEAR 2 (CONT'D)
Develop Activity Monitoring, Evaluation and Learning Plan (AMELP)	Desk Review, STTA and LTTA	USAID IUWASH Tangguh AMELP submitted and approved by USAID							
Develop MEL and Workplan sections in the USAID IUWASH Tangguh TAMIS	Design work, STTA and LTTA	MEL and Workplan sections created and populated in the USAID IUWASH Tangguh TAMIS							
Disseminate performance indicator reference sheets (PIRS) to USAID IUWASH Tangguh team (in collaboration with communications team)	Design work, STTA and LTTA	Wider team gains knowledge on USAID IUWASH Tangguh outcome and output indicators							
Conduct annual workshop for MEL national and regional team	Workshop, LTTA	Capacity building on data tracking and monitoring tools and planning for baseline survey							
Distribute PY2 target during the PY2 workplan workshop	Workshop. LTTA	PY2 target developed and agreed							
Support Implementation of Impact Evaluation	Workshop, Meeting and LTTA	Input to methodology of Impact Evaluation and baseline data collection supported							

## 3. PY I AWP - DETAILED TASK DESCRIPTION

In this chapter, we provide a detailed description of each objective and highlight tasks and activities for both the life of activity and what we aim to achieve in Year I; and present key partnerships, cross-objective integration plans, contributions of activities under each objective to the MEL targets, and key milestones and timelines for PY1 implementation.

## 3.1. OBJECTIVE I STRENGTHENING WASH AND WRM SECTOR GOVERNANCE AND FINANCING

The WASH and WRM financing and governance activities in the Integrated Resilient IUWASH System (IRIS) approach connect partnerships, data, and finance with GOI and other stakeholders from the public and private sectors to design, shape, and enforce the policies and regulations governing WASH services and water resources development. The activities will promote equity and build the capacity of LGs, PDAMs and other stakeholders to prepare and analyze budgets while identifying opportunities for further investment and revenue generation. USAID IUWASH TANGGUH will optimize alternative financing through inviting the private sector to participate in financing of economically viable WASH and WRM activities. Private sector investment in WASH and WRM improvement is expected to fill GOI funding gaps.

During PYI, Objective I will focus on foundational activities to support local governments' efforts to strengthen finance and governance for the WASH and WRM sector, thereby facilitating increased access to safe water and sanitation services. The PYI activities in Objective I, for example, will include the identification of policy and regulatory gaps for WASH and WRM improvements, coordination with the Ministry of Finance and Bappenas to assess microfinance financing support levels by GOI, and liaising with the Ministry of Public Works and Housing to collect information on the current status of regionalized Sistem Penyediaan Air Minum (SPAM), or water supply systems.

#### 3.1.1. PARTNER COLLABORATION

The key institutional partnerships necessary for the successful implementation of activities under Objective I are detailed in the exhibit below.

Exhibit 9. Objective 1 Key Partners	
Partner	The activity
BAPPENAS	Update the WASH microfinance program being supported by GOI funding.
Ministry of Finance	Update the WASH microfinance program being supported by GOI funding.
FORKALIM	Update the regulatory development process of domestic waste-water tariff that exempts for the value added tax (VAT) charge.
MOHA, SUPD2 directorate	Identify the potential support to MOHA, SUDP2 directorate for SPM mainstreaming, review, scaling up.
MOHA, BLUD, BUMD, BUMDES directorate	Identify the potential support to MOHA, directorate of BLUD, BUMD, BUMDES for promoting UPTD into BLUD organization for sanitation services
Ministry of Public Works and Housing	Identify the potential project of regionalized SPAM for the off-taker's distribution networks expansion program to absorb water from the regionalized system.
Ministry of Public Works and Housing	Identify the capacity program of water and sanitation sector under training center (BTAM) to potentially collaborate with the Activity
PT Sarana Multi Infrastruktur (PT SMI)	Identify technical assistance for PT SMI in providing long-term debt for water project.

#### 3.1.2. ACTIVITY INTEGRATION

The activities under Objective I tasks involve close coordination with other objective teams to ensure success. For example, policy development for WASH and WRM requires that the sectors' issues are promoted by the respective sector specialist or coordinator. The governance specialist/coordinator will lead the activities, such as guiding or liaising with local government and developing policies and regulations for the sectors. Similarly, identifying financing opportunities for WASH and WRM improvement requires feasibility studies; the Objective I team initially requires technical consideration from the sector specialist before performing the financial analysis for the PROJECT. OTHER ACTIVITIES WILL FOLLOW A SIMILAR PROCESS TO ENSURE SUCCESS.

#### 3.1.3. TASK BY TASK DETAILED DESCRIPTION

Outcome 1.1. covers the activities to develop, improve, implement, monitor and enforce safely managed WASH, water security and WRM policies and regulations. The USAID IUWASH Tangguh team will provide technical assistance to local government and other CSOs, user groups and engaged citizens to develop policies and regulation for improved WASH and WRM. The potential policies include water-use permitting and monitoring tools to ensure that upstream users (in agriculture, industry and PDAM) comply with water allocation and contribute to watershed protection activities. The team will also facilitate establishment of LG-owned companies (e.g. BUMD) that will provide integrated services for drinking water and wastewater systems. The team will also prioritize pathways for passage and implementation of draft policies and regulations by prioritizing the issues that offer the most promise for reform in national government agencies. The activity also considers stimulating participation of diverse stakeholders in broader policy reform and enforcement initiative agendas. The team will consult with associations of cities and municipalities (such as APEKSI), private sector actors in financing, donors, and operator's associations such as PERPAMSI, FORKALIM, or professional associations of IATPI, HAKLI, and academia to support the policy and regulation development for improvement of WASH and WRM.

# Task I.I.I Develop and facilitate policies and regulations for improved WASH/WRM processes at national and local government levels

Implementation of Task 1.1.1 will include efforts to:

- Identify the existing regulations of the water-use permitting and monitoring tools and other high-priority activities and outputs; and find the gaps for the basis of activities to follow.
- Meet with Bappenas and MOF to update the implementation of WASH microfinance regulatory development supported by USAID IUWASH PLUS and set a plan for codifying the revised process. Update the existing regulatory development process for establishing the value added tax (VAT) exemption for domestic wastewater tariff.
- Identify potential support to Ministry of Home Affair (MOHA), office of SUDP2 directorate for SPM mainstreaming and scaling through development of SPM guidelines, implementation and monitoring tools.
- Identify potential support to provide to MOHA, Office of BLUD, BUMD, BUMDES Directorate for promoting the transition of UPTD into BLUD organization for sanitation services to assure the sustainability of wastewater service management.; Support will include development of products for LGs to facilitate the transition, such as BLUD establishment

guidelines and implementation and monitoring tools that consists of key performance indicators of the BLUD.

Under Outcome 1.2 the team will provide technical assistance designed to increase public and private budget and expenditures in ways to prioritize equitable, gender responsive, climate-resilient, and sustainable WASH and WRM services. This includes efforts to identify financial flows and gaps at the WASH/WRM sectoral level. USAID IUWASH Tangguh will develop a model based on accounting tools for tracking income, expenditures, and debt at multiple levels from individual service providers to LGs, provincial authorities, and national government as well. With the model, the visibility and understanding of tariff structures, operation and maintenance (OM) expenses and capital improvement programs will lead to greater insight and improve budgeting and financial planning for water and sanitation services by PDAMs and UPTD. Advocacy—supported by Objective 4 colleagues—for the adoption and use of the model and for gender mainstreaming in WASH programs will be essential to the Activity's success.

Other tasks to achieve this outcome include financial planning and analysis at the LG, PDAM, and UPTD service provider level. The activities will include providing technical assistance to LG and WASH service providers to collect and analyze annual raw LG budget data (APBD) and complete a strategic financial planning exercise to identify, analyze, and prioritize expenditures and required investments in the WASH and WRM development plans. Analyzing results tied to the target Minimum Service Standard (SPM) required by each LG will position the team to forecast the extent of financing gaps at local levels. From this baseline, USAID IUWASH Tangguh will offer ways to further integrate GRBP, and provide insights into alternative financing entry points, including opportunities from GOI, joint venture agreements, public private partnerships (PPPs) and others. It will be essential for the team to work closely with the Regional Development Planning agency (Bappeda), as well as WASH and WRM institutions to assure for having budget allocation for WASH and WRM programs to support the increased access to safely managed drinking water and sanitation services. USAID IUWASH Tangguh will develop a model APBD tracking tool to monitor WASH and WRM expenditure allocations annually as part of the Activity's analysis of the budget spending for the sectors.

Lastly, the team will work to increase public and private financing opportunities by creating a pipeline of WASH and WRM related investments. The pipeline will consist of a prioritized list of projects from LGs and PDAM that meet specific criteria for financing sources. The team will build out and present a clear process for pipeline building in the PY2 Workplan.

In Year I, USAID IUWASH Tangguh will:

- Develop a plan to create a data flow model or tool that LGs can use to identify WASH and WRM financial flows and gaps;
- Identify local budget (APBD) information for WASH and WRM expenditures and apply findings to develop advocacy material for LGs to analyze, and prioritize expenditures and required investments in the WASH and WRM development plans;
- Identify the preliminary potential water improvement projects to be financed, such as the small-scale water hibah program provided by GOI and regionalized water supply system (SPAM) through discussion with Ministry of Public Works and Housing; and
- Identify potential LG/PDAM projects that would require additional financing and include them in a shortlist for an initial WASH/WRM investment pipeline.

Under Outcome 1.3, we will work to increase WASH and WRM sector capacity. Technical assistance will include mentoring Bappenas and Pokja AMPL to expand support to LG institutions in calculating and setting the target of RPIMN 2020-2024 and RPIMD. The project will also update the indices developed by the predecessor project, USAID IUWASH PLUS. Focus will be placed on GODEX, SANDEX and PDAM indices, strengthening the tools by incorporating WRM and GRDP parameters to facilitate holistic monitoring of changes in capacity, and working with the Ministry of Home Affair (MOHA) to institutionalize the tool and replicate it for use in other cities/districts, especially for GODEX and SANDEX.

USAID IUWASH Tangguh will also engage the WASH Training Center Institution of Water and Sanitation under the Ministry of Public Work and Housing (BTAM) to improve the capacity of the water utilities staff so they can improve their performance. Finally, under the Partnership and Innovative Fund (PIF), USAID IUWASH Tangguh will finance and facilitate mentoring for the 'sick' PDAMs by other 'healthy' PDAMs.

The activities being performed in PY1 will include:

- In collaboration with sectors and SBC, revise the existing indices (GODEX, SANDEX and PDAM index) to incorporate WRM and GRDP parameters;
- Coordinate with Bappenas to identity LG priority support needs to ensure the RPIMD targets are aligned with and will support achievement of the RPIMN 2020-2024 target for WASH:
- Work with WASH and WRM institutions to identify improvement needs that could be addressed through the training institutes such as BTAM under MPWH. Similarly, the sanitation sector will involve FORKALIM to identify training activities.

Lastly, Outcome 1.4 will implement measures to increase accountability and inclusivity in local government WASH and WRM governance. The activities will include expanding mechanisms to promote social accountability and inclusivity by incorporating new indicators into the existing indices, such as GODEX, and adjusting them to the city or district context. USAID IUWASH Tangguh will also strive to increase social accountability and gender inclusiveness in governance by expanding and scaling citizen engagement mechanisms for WASH and WRM through radio programming, civic forums, SMS gateways, and other measures that position partners to serve as influential advocates. Using the PIF, the activity will also include advancing the existing platforms, which may include LAPORSP4N dashboard or Smart City Dashboard, to improve feedback loops through which the public may more easily comment and contribute to decision making of regarding LG for improvements to WASH and WRM.

Activities for Year I, including associated outputs, and implementation timelines are presented in the exhibit below.

Exhibit 10. Objective 1 PY1 Ac	tivities and Tim	nelines							
					YEAR	I TIM	EFRAN	1E	
SUB-TASK	INPUTS	OUTPUTS	APR	MAY	NOI	JUL	AUG	SEP	YEAR 2 (CONT' D)
Task I.I.I.  Develop and facilitate policies and regulations for improved WASH/WRM process at national and local government level  Identify the existing regulations of the water-use permitting and monitoring tools and other high-priority activities and outputs; and find the gaps for the basis of following activities.	Desk review, LTTA	List of regulation/policy required for WASH/WRM improvement							
Task I.I.I.  Develop and facilitate policies and regulations for improved WASH/WRM process at national and local government level  Meet with Bappenas and MOF to update the WASH microfinance financing program being supported by GOI fund	Meetings, FGD. LTTA	Workplan of further process at MOF/Bappenas and support from I-Tangguh							
Task I.I.I.  Develop and facilitate policies and regulations for improved WASH/WRM process at national and local government level  Update the progress of policy development of VAT exemption for wastewater tariff (Meeting with FORKALIM)	Meetings, FGD	Workplan of further process at MOF and support from I- Tangguh							
Task I.I.I.  Develop and facilitate policies and regulations for improved WASH/WRM process at national and local government level  Identify the potential support to MOHA,	Meetings, FGD, LTTA, STTA	Workplan of further process at SUDP2 and support from I- Tangguh							

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Exhibit 10. Objective 1 PY1 A	ctivities and Tim	nelines							
					YEAR	I TIM	EFRAN	1E	
SUB-TASK	INPUTS	OUTPUTS	APR	МАУ	JUN	JUL	AUG	SEP	YEAR 2 (CONT' D)
SUDP2 directorate for SPM mainstreaming, review, scaling up (products/documents for LG to include: SPM guidelines, implementation and monitoring tools)									
Task I.I.I.  Develop and facilitate policies and regulations for improved WASH/WRM process at national and local government level  Identify the potential support to MOHA, office of BLUD, BUMD, BUMDES directorate for promoting UPTD into BLUD organization for sanitation services; (products/documents for LG to include: BLUD establishment guidelines, implementation and monitoring tools	Meetings, FGD, LTTA, STTA	Workplan of further process at BLUD, BUMD and support from I- Tangguh							
Task I.2.1. Improve data flows to identify financial flows and gaps at the WASH/WRM sectoral level  Develop the plan involving the LG to create the model or tool of data flows to identify financial flow and gaps of WASH and WRM sectors	Meeting, FGD, LTTA	Workplan completed							
Task 1.2.2.  Support financial planning and analysis at PDAM  Identification of the potential project of regionalized SPAM for the off-taker's distribution networks	Meeting, FGD, LTTA	Information from MOPWH gathered							

Exhibit 10. Objective 1 PY1 Ac	ctivities and Tim	nelines							
					YEAR	I TIM	EFRAN	1E	
SUB-TASK	INPUTS	OUTPUTS	APR	MAY	JUN	JUL	AUG	SEP	YEAR 2 (CONT' D)
expansion program to absorb water from the regionalized system (Meeting with Ministry of Public Works and Housing)									
Task 1.2.2.  Support financial planning and analysis at PDAM  Develop the APBD tracking tool to identify local budget and develop historical analysis for WASH/WRM improvement	Meeting, Workshop, FGD, LTTA	APBD tracking tool completed to include historical analysis							
Task 1.2.3. Identify financing opportunities and create pipeline of WASH/WRM related investment  Identify potential projects with LG/PDAM to be listed in the pipeline	Meeting, Workshop, FGD, LTTA	Potential projects are identified							
Task 1.3.1.  Build capacity of WASH/WRM coordination institution In collaboration with sectors and SBC objective to develop the revision of the existing indices (GODEX, SANDEX and PDAM index) to add the WRM and GRDP parameters to measure the increase.	Meeting, Workshop, FGD, LTTA	Revised indices completed							
Task 1.3.1.  Build capacity of  WASH/WRM coordination institution  Meet with Bappenas to identity the activities of supporting LG for	Meetings, LTTA, FGD	Activity's scoping and plan gathered from Bappenas							

Exhibit 10. Objective 1 PY1 Activities and Timelines									
					YEAR	I TIM	EFRAN	1E	
SUB-TASK	INPUTS	OUTPUTS	APR	MAY	NOL	JUL	AUG	SEP	YEAR 2 (CONT' D)
setting the RPJMD target to achieve the RPJMN 2020-2024 target for WASH									
Task I.3.1.  Build capacity of WASH/WRM coordination institution  Identification of the capacity program of water and sanitation sector under training center (BTAM) to potentially collaborate with I Tangguh. Similarly, sanitation sector will coordinate with FORKALIM	Meetings, LTTA, FGD	Information from BTAM, MOPWH and FORKALIM gathered							
Task 1.4.1  Expand mechanisms to promote social accountability and inclusivity  Identify existing GODEX and add the parameter of accountability and inclusivity in WASH and WRM governance	Meetings, LTTA, FGD	GODEX consists of accountability and inclusivity parameters							

# 3.2. OBJECTIVE 2A INCREASE ACCESS TO POOR INCLUSIVE, CLIMATE **RESILIENCE OF DRINKING WATER SERVICES**

USAID IUWASH Tangguh aims to increase access to safely managed drinking water for 1.5 million people (375,000 households) over the LOA, and in doing so to contribute to the RPJMN 2020-2024, which targets 15 percent of households to be able to access safely managed drinking water by 2024. To achieve this outcome, USAID IUWASH Tangguh will provide extensive technical support to PDAMs, with a focus not only on improving internal operational performance (technical, financial and institutional), but also on encouraging factors such as good governance, increased financing, linkages to water resources management (WRM) objectives, stronger promotion and marketing, gender inclusiveness, and development of robust citizen engagement mechanisms.

Activities under Objective 2a Water are divided into: Task 2.1.1 Apply workforce development framework to support service provider, Task 2.2.1 Develop portfolio approaches to improving operational and financial efficiencies, Task 2.3.1 Expand menu of service model option for PDAM and LG integration and adoption, and Task 2.4.1 Support adoption of novel data systems by service providers.

USAID IUWASH Tangguh's Objective 2 Water team will apply a demand-based approach based on application of a performance index for water supply. The project support will be given based on the gaps identified in the baseline of the index and opportunities for performance improvement for PDAMs and Local Governments. This leads to a portfolio of targeted and mutually agreed activities integrated into service providers' plans and budgets. In PYI, the results of the PDAM performance index, which was developed and tested under IUWASH PLUS, will be used in PY2 to prioritize the main activities to improve PDAMs over the next 5 years.

#### 3.2.1. PARTNER COLLABORATION

The Objective 2 water team will collaborate with various partners from the government, donors, universities, and the private sector to play a role of facilitator, helping the partners to harmonize programs in the same location and attract potential external financing from government agencies and other institutions. USAID IUWASH Tangguh will work with 36 PDAMs and 39 local governments committed to improving drinking water services, and at the national level we will collaborate with other partners as shown in the exhibit below. In the first year, USAID IUWASH Tangguh will encourage commitment, participation, and synchronization and share the roles of all relevant parties in order to realize the target of achieving safely managed drinking water in accordance with the 2020-2024 RPIMN.

Exhibit 11. Objective 2a Key Partners								
Partner	The activity							
BAPPENAS	Coordination in site selection of USAID IUWASH Tangguh, development of workplan							
MoPWH Directorate of Water Drinking	Coordination in site selection of USAID IUWASH Tangguh, development of workplan							
Balai Teknologi Air Minum (B-TAM)	Coordination on preparation of Road Map Capacity Building BUMD/PDAM							
Central Project Management Unit (CPMU)	Coordination on preparation of supporting Water Grant and Performance Base Grant							
PERPAMSI	Coordination in preparation of PDAM Capacity Building, MIS RPAM Implelementation							
WORLD BANK	Coordination of NUWASP Program: Sheed Grant, Matching Grant, Performance Based Grant (PBG)							
KIAT	Coordination of PDAM performance appraisal guide and MIS							
AKATIRTA	Coordination preparation of Road Map and Center of Excellence BUMD/PDAM Capacity Building							

#### 3.2.2. ACTIVITY INTEGRATION

Collaboration and integration of activities across objectives is essential to ensure Objective 2 activities are a success. This includes collaboration on increasing the professional capacity of the PDAM workforce, improving the performance of PDAMs, WASH institutional arrangements and services by ensuring that they are inclusive, climate resistant, and financially feasible. The team will also provide support to develop a monitoring, learning, and innovation platform for use by partners in identifying areas for improvement and tracking performance over time.

In executing Objective 2, the team will collaborate with Objective I to help unlock financing (via APBD, APBN, PSE and other measures) to improve and develop SPAM, and to support regulatory reform where needed. The Objective 3 team will support Objective 2 goals by leading activities to help ensure the availability of raw water and to mitigate the climate and disaster stressors impacting PDAM infrastructure. Collaboration with Objective 4 will involve development of marketing/promotion, gender equality and social inclusion (GESI) and citizen engagement mechanisms in service to WASH and sanitation objectives. In PY1 Objective 1, 2, and 4 will start by conducting a pre-assessment with the Directorate of Drinking Water MPWH related to the potential for financing the Regional SPAM, capacity building, and water grant program.

#### 3.2.3. TASK BY TASK DETAILED DESCRIPTION

## Task 2.1.1 Apply workforce development framework to support service provider

In the implementation of Task 2.1.1, USAID IUWASH Tangguh will focus on capacity building activities for PDAM workers, with a well-documented training process, measurable training results, and user-friendly training delivery tools. Supporting BTAM in the implementation of the PDAM/BUMD capacity building road map by making Akatirta a competency-based and certified center of excellence training, and also to encourage financing for capacity building and training in the PDAM Index and adopted into the PDAM Business Plan is a strategy to encourage sustainable and continuous increase in the capacity of PDAMs workers

To increase the capacity of PDAM workers, in accordance with the Performance Work Statement, Objective 2 will carry out activities including:

- Convening a workshop with PDAM partners, key ministries and PERPAMSI to identify gaps in the capacity of water providers especially between PDAMs that are sick, less healthy, and healthy, and provide recommendations for strategies to improve PDAM performance based on indicators in the PDAM Index. One of the indicators in the PDAM index is improving aspects of human resources through training and capacity building which is the basis for staff career pathways by PDAM management and competency-based training.
- Supporting BTAM and Akatirta efforts to socialize and implement the PDAM/BUMD Capacity Building Roadmap, with a focus on competency-based training; Supporting BTAM and Akatirta by building the capacity of existing instructors and managers and providing resources on how to mainstream gender considerations into curricula as well as providing opportunities for more female instructor and managers. Furthermore, USAID IUWASH Tangguh will also provide opportunities for PDAM's female staffs to improve their technical knowledge and management capacity; and
- Deliver a technical support package to B-TAM and Akatirta that is tailored to advancing their progress towards achieving PDAM Training Center of Excellence status.

PYI will begin with efforts to hold meetings with PDAM/BUMD with BTAM, Directorate of Drinking Water MPWH, Perpamsi and Akatirta in order to develop an implementation plan and Capacity Building Roadmap for supporting increased skills of PDAM/BUMD Staff.

## Task 2.2.1 Develop and apply portfolio approaches to improving operational and financial efficiencies

Task 2.2.1 will focus on improving the efficiency of PDAMs' operational and financial performance. This activity uses a data-driven approach by applying the PDAM Performance Index that was originally developed by USAID IUWASH PLUS—and which uses PDAM performance assessment indicators from the Directorate of Drinking Water (MPWH)—to evaluate PDAMs performance. After assessing performance against the index and establishing a baseline, PDAMs will set performance targets, identify positive deviations, and respond to trends in performance data on a monthly basis.

In task 2.2.1, it will ensure that drinking water is safely managed drinking water by ensuring/reducing bacteriological contamination in the PDAM distribution network through decreasing NRW, so that bacteriological contamination (E-Coli) that contaminates into distribution pipes can be prevented and reduced. The NRW reduction methodology must be supported by a good mapping system through GIS/MIS, Standard Operating Procedures (SOP), energy efficiency improvements, ensuring PDAMs are financially healthy, and ensuring all recommended programs are included in the Business Plan as part of sustainability and continuously

In accordance with the Performance Work Statement, specific activities include:

- Increase water access to the poor through the collaboration with the water grant program by GOI. The team will target relevant households by conducting technical mapping of access levels and gender and wealth parameters through the mWater tool, and then carrying out marketing and promotions to target areas.
- Develop and improve PDAM GIS/MIS to support the improved PDAM operation so they will better serve the customers.
- Strengthening PDAM Capacity for NRW Reduction Program engagement, which is NRW program will also be encouraged to participate in the Performance Base Grant (PBG).
- Strengthening PDAM Capacity for an energy efficient (EE) Improvement Program in order to reduce operating costs and apply them towards improved service delivery, which is EE program will also be encouraged to participate in the Performance Base Grant (PBG).
- Support PDAM Business Planning which will serve as a precursor to securing financing for service improvements. To ensure that USAID IUWASH Tangguh programs to encourage the achievement of safely manage drinking water are carried out by the PDAM continuously and sustainably, all programs need to be adopted into the PDAM Business Plan to ensure budgeting and commitment.
- Facilitate the fulfillment of full cost recovery (FCR) tariff setting and roll-out.
- Develop tools and Standard Operational Procedure/SOP (Finance, Technical, Customer Handling) to align with best practices and guide PDAM-led operations over the long term.

Activities in PYI will begin by conducting FGDs and holding meetings with the Directorate of Drinking Water (MoPWH) and Perpamsi regarding the planning, agenda, and forms of collaboration related to the national program PBG-NUWSP (NRW/EE).

# Task 2.3.1 Expand menu of service model options for PDAM and LG integration and adoption

Task 2.3.1 will ensure safely managed drinking water that is City-wide inclusive, climate resilient, financial viable WASH, and WRM institutional arrangements and service models established and expanded, as well as sustained and continued.

To achieve this, it is done by encouraging water resilience in ensuring the availability of raw water, water resilience in ensuring the security of PDAM infrastructure against disasters, alternative financing (APBN, APBD, PSE) in the development and improvement of SPAM & regulatory support, water resilience in ensuring safely managed drinking water quality (RPAM and ZAM), and Gender Equality and Social Inclusive (GESI), and ensuring all recommended programs are included in the Business Plan as part of sustainability and continuously

In accordance with the Performance Work Statement, under Task 2.3.1, USAID IUWASH Tangguh will deliver the following activities over the LOA:

- Assessment and identification of technical needs for the development and improvement of SPAM services models (FS, RDS, etc.), as well as identification of potential beneficiaries eligible for financing through APBD, APBN, and other PSE measures.
- Develop and promote a water resilience service model through PDAM Raw Water Quality and Quantity Monitoring (WQQ), including installation of CWIS (Climate and Water Information Systems). This data is needed by WRM objective 3 to compile a raw water vulnerability study and a PDAM infrastructure vulnerability study to disasters and climate change, and is also needed for the preparation and evaluation of the RPAM.
- Develop and promote a water resilience service model through the Facilitated Water Safety Plan (RPAM) and training for senior PDAM managers to develop action plans and mobilize resources/skills (partly through twinning arrangements) to manage risk and ensure business continuity.
- Develop and improve a water resilience service model through Zona Air Minum Prima (ZAMP) including improvements to chlorination systems, and regular Water Quality and Quantity Monitoring (WQQ) for the distribution network and consumers.

PYI activities include conducting FGDs and meetings with the Directorate of Drinking Water (MPWH), Perpamsi, and Akatirta regarding the planning, agenda, and forms of collaboration that will be carried out related to RPAM and ZAMP priority initiatives.

#### Task 2.4.1 Support adoption of novel data system by service providers

Under Task 2.4.1, USAID IUWASH Tangguh will develop a sustainable monitoring and evaluation system based on data gathered through assessments carried out in Tasks 2.1.1 and 2.2.1. The team envisions that this system can be used by PDAMs to evaluate themselves and recognize negative and positive deviations (against the PDAM Performance Index baselines), which can be used to formulate annual improvement programs (RKAP) and five year business plans. This data-based monitoring and evaluation system will then be linked to the local and national government data systems (Godex and SPM), and also to the national assessment system for PDAM Performance Indicators conducted by the Directorate of Drinking Water (MPWH). In accordance with the Performance Work Statement, activities during the five years of implementation include:

- Support MPWH and contribute to development of national tools of PDAM Performance Indicator through MIS development (Novel Data).
- Review and improve PDAM Performance Index tools.
- Workshop annual monitoring of PDAM Performance Index.

In PYI, the team will begin by preparing the PDAM Performance Index tools and FGDs and meetings with MoPWH to assess the needs of MIS PDAM Performance Indicators.

Exhibit below describes the PYI activities, associated outputs and timeline of Objective 2.a. Water Supply Sector.

Exhibit 12. Objective 2a PY1 Activities and Timelines									
					Yea	r I Ti	meFran	ne	
SUB-TASK	INPUTS	OUTPUTS	APR	МАУ	JUN	JUL	AUG	SEP	YEAR 2 (CONT' D)
Task 2.1.1: Apply workforce development framework to support service provider  Conducting FGDs and meetings Road Map of Capacity Building for PDAM/BUMD with BTAM-Dit.AM MoPWH, Perpamsi and Akatirta	FGD, LTTA	Start-up task completed Agreement related to strategy, agenda and menu of capacity building activities for Akatirta as a Center of Excellence (COE) Training, agenda for compiling training curriculum based on competency, certification type and methods, and MIS supporting							
Task 2.2.1: Apply Develop portfolio approaches to improving operational and financial efficiencies  Conducting FGDs and meetings with the Dit.AM MoPWH, Perpamsi, regarding the planning, agenda, and forms of collaboration related to the national program PBGNUWSP (NRW/EE)	FGD, LTTA	Start-up task completed Agreement related to the location of PDAM PBG USAID IUWASH Tangguh, agenda and schedule for preparation of readiness criteria							
Task 2.3.1: Expand menu of service model option for	FGD, LTTA	Start-up task completed							

Exhibit 12. Objective 2a PY1	Activities and Tir	melines							
					Yea	r I Ti	meFran	ne	
SUB-TASK	INPUTS	OUTPUTS	APR	MAY	NOC	JUL	AUG	SEP	YEAR 2 (CONT'D)
PDAM and LG integration and adoption  Conducting FGDs and meetings with the Dit.AM MoPWH, Perpamsi, Akatirta regarding the planning, agenda, and forms of collaboration that will be carried out, related RPAM and ZAMP priority		Agreement related to the location of PDAM ZAM and RPAM USAID IUWASH Tangguh, agenda and schedule activities, and budgeting plan							
Task 2.4.1: Support adoption of novel data system by service providers  Preparing the PDAM Performance Index tools  Conducting FGD and meeting with Dit.AM MPWH to assess the needs of MIS PDAM Performance Indicators	FGD, LTTA	PDAM Index Tools completed Determining indicators, weights, and scores including to accommodate Gesi and WRM indicators and scores in PDAM Index							

## 3.3. OBJECTIVE 2B: INCREASE ACCESS TO POOR INCLUSIVE, CLIMATE RESILIENT SANITATION SERVICES.

The outcomes for Objective 2b are to ensure 1.5 million people gain access to safely managed drinking water and one million people gain access to safely managed sanitation. This section will focus on the sanitation services component. The major activities in Objective 2b for safely managed sanitation will be promoting desludging services for on-site sanitation in local governments.

Of the 39 selected locations for USAID IUWASH Tangguh, 30 locations have IPLT and operators of domestic wastewater, while nine have neither IPLT nor the operator. The existence of IPLT and operators are essential in implementation of LLTT to achieve safely managed sanitation targets. USAID IUWASH Tangguh will focus on convincing local governments with IPLT and operators to maximize the utilization of the IPLT by increasing the LLTT customer base through intensive marketing. For local governments without IPLT, USAID IUWASH Tangguh will advocate for budget allocations for IPLT construction, including convincing local governments to find alternative funding through private participation. As seen in the exhibit below, nine LGs have no IPLT and operator, II LGs have IPLT but no clarity about operator (need confirmation), two LGs have IPLT, operator and regulation, and 17 LGs have all requirements.

USAID IUWASH Tangguh will work with local governments to help them fulfill all the minimum requirements to implement LLTT. The most challenging task is to support the LGs without IPLT to implement the LLTT, where IPLT is the essential factor in LLTT implementation. USAID IUWASH Tangguh will socialize to the LGs that IPLT is necessary to achieve safely managed sanitation, and that the alternative would be to build more costly sewerage systems. If there is interest in improving the sanitation conditions, LGs must develop a plan in pursuing the safely managed sanitation target. For the transition period before IPLT is available, contingency plans should be prepared, such as cooperation with neighboring LGs to share the IPLT. The USAID IUWASH Tangguh team will monitor the progress of local government in terms of readiness in LLTT implementation. The LLTT ladder evaluated against proposed USAID IUWASH Tangguh sites is shown in Exhibit 13.

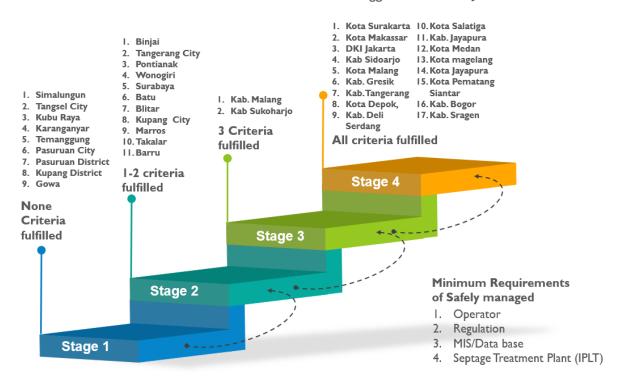


Exhibit 13. LLTT Status in USAID IUWASH Tangguh Locations as June 2022

In the first year, USAID IUWASH Tangguh will facilitate the participation of local governments in reviewing the status of sanitation performance in terms of institutional, regulation, technical, and financial aspects using the sanitation index. For LGs that participated in IUWASH PLUS, the review will use the last data that was collected in 2020 as reference for discussion; data from 2021 will be used as the baseline. New participating LGs will begin with new data in 2022.

#### 3.3.1. PARTNER COLLABORATION

USAID IUWASH Tangguh team will collaborate closely with related ministries such as Bappenas, Directorate of Sanitation (MPWH), Directorate SUPD II MOHA, association of wastewater operator (FORKALIM), the World Bank, UNICEF, and KIAT in promotion of LLTT in local governments. USAID IUWASH Tangguh will also work with Balai Teknik Sanitasi (BTS) in expanding the training on LLTT and design of IPLT. Exhibit below summarizes the key partners and their role in supporting the activities implemented by Objective 2b Team.

Exhibit 14. Objective 2b Key	Partners
Partner	The activity
BAPPENAS	Coordination in site selection of USAID IUWASH Tangguh, development of workplan
FORKALIM	Coordination of twinning program for wastewater operator capacity building
MOHA, SUPD2 directorate	In collaboration with objective I to identify the potential support to MOHA, SUDP2 directorate for SPM mainstreaming, review, scaling up.
MOHA, BLUD, BUMD, BUMDES directorate	In collaboration with objective I to identify the potential support to MOHA, directorate of BLUD, BUMD, BUMDES for promoting UPTD into BLUD organization for sanitation services
Ministry of Public Works and Housing, Directorate of Sanitation	Coordination in site selection of USAID IUWASH Tangguh, development of workplan
Balai Teknik Sanitasi	Coordination on training plan for LG staff on LLTT and IPLT design
UNICEF	Coordination of safely managed sanitation roadmap and on-site sanitation roadmap
The World Bank	Coordination in citywide inclusive sanitation
KIAT	Coordination of sanitation program in co-location

#### 3.3.2. ACTIVITY INTEGRATION

Objective 2 activities will be inter-related and synergized with other objectives. For example, the preparation of sanitation index as well as promoting UPTD transition to BLUD and diversification of PDAM business in wastewater will require collaboration with the financial and governance components of Objective I, and with Objective 4 in accommodating GESI throughout all Objective 2 activities.

In terms of sanitation resilience, Objective 2 will collaborate with Objective 3 in developing a sanitation resilience concept including preparation of climate risk and adaptation concept for capacity building.

#### 3.3.3. TASK BY TASK DETAILED DESCRIPTION

#### Task 2.1.1 Apply workforce development framework to support service providers

The USAID IUWASH Tangguh team will strengthen the capacity of sanitation institutional operators in participating local governments in implementing LLTT (regular desludging) program by providing training for the staffs of UPTDs and LGs on LLTT and IPLT design. In training, the team will use the guidelines developed by the Ministry of Public Work and Housing under IUWASH PLUS support. Over the life of the project, USAID IUWASH Tangguh will carry out capacity building activities to strengthen local sanitation institutions through empowering the sanitation training institute (BTS) and the association of sanitation operators (FORKALIM). Supporting development of a vigorous training institute and strong FORKALIM could pave the way to increase the capacity of local sanitation operators in LLTT and eventually improve safely managed sanitation access for communities. Over the life of the project, USAID IUWASH Tangguh will carry out several activities under task 2.1.1 as follows:

- Convene workshop to identify capacity gap in domestic wastewater operators;
- Provide technical assistance to Balai Teknik Sanitasi (BTS) in facilitating in-class and e-Learning for LLTT and IPLT development;
- Develop BTS training plan for sanitation operator and LG staff;
- Provide technical assistance to FORKALIM in continuing the cross learning amongst sanitation operators on demand-based topics.

In the first year, USAID IUWASH Tangguh will prepare for all the activities under task 2.1.1 by completing consultations with BTS, FORKALIM, and Directorate of Sanitation.

## Task 2.2.1 Develop portfolio approaches to improving operational and financial efficiencies

The USAID IUWASH Tangguh team will provide technical assistance to stakeholders in scaling up the LLTT program. USAID IUWASH Tangguh has identified the following main activities for LOA implementation, as listed in the performance work statement:

- Conduct a lessons learned exercise on the primary existing sanitation program such as LLTT, septic tank expansion through micro credit, and innovative IPLT design
- Promote PDAM as domestic wastewater operator
- Identify alternative customer registration for LLTT billing where water bills are not possible
- Identify IPLT conditions especially the IPLT capacity to be able to provide recommendation on ideal capacity needed, budget requirements and its sources
- Promoting improvement of financial efficiency of potential UPTD to become BLUD
- Facilitate LLTT implementation in 35 LGs
- Facilitate collaboration amongst LGs for IPLT sharing

The activities above will be started in the second year, while in year I, the team will focus on collecting and analyzing data of safely managed sanitation coverage, existing operators of wastewater in LGs, and capacity of IPLT. The team will also focus on building communication lines with potential stakeholders such as the Directorate of Sanitation, Balai Teknik Sanitasi, and FORKALIM.

## Task 2.3.1 Expand menu of service model for PDAM and LG integration and adoption

USAID IUWASH Tangguh will support LGs in improving sanitation services by introducing the resilience concept into sanitation programs. In the first year, USAID IUWASH Tangguh will be preparing the concept of climate risk and adaptation in the sanitation sector and preparing capacity building programs to ensure that the USAID IUWASH Tangguh team gains understanding of the sanitation resilience concept. Climate change is shortening the wet season, but the higher intensity of rainfall is resulting in an increase in flooding - in terms of inundation area and severity. These climate- related disasters could affect sanitation facilities through flood water mixing with sludge in the septic tank through the inlet and outlet system, which could then contaminate surface water, and damage the functionality of the septic tank. IPLT that are built in lower areas of cities are also prone to be flooded which could endanger the environment with contamination and damage the functionality of the IPLT. This kind of climate change impact on sanitation systems needs to be considered and anticipated by adaptive action to reduce the hazard, both to existing systems and to planned systems.

### Activity for year 1 includes:

- Identification of climate risk and climate adaptation measures for sanitation systems
- Preparation and delivery of sanitation resilience capacity building program for internal USAID IUWASH Tangguh team

## Task 2.4.1 Support adoption of novel data systems by service providers

USAID IUWASH Tangguh will support the national government to monitor the progress of local government in implementing LLTT programs to achieve the safely managed sanitation target. A tool is needed to monitor the performance of local government in LLTT, and access to safely managed sanitation. Local government sanitation performance will be measured by a Sanitation Index (Sandex) with the following parameters: status of institution, regulation, financial, sanitation access, and operational aspects. GESI and resilience considerations will be added as new parameters in the Sandex. In this regard, USAID IUWASH Tangguh will provide technical assistance to the Sanitation Directorate in monitoring LLTT progress and safely managed sanitation access. Foundational activities in Year I include:

- Communication with Sanitation Directorate
- Convene a workshop on sanitation index review for performance monitoring of sanitation operators
- Convene a workshop on baseline data collection in all participating local governments, including baseline data of Sanitation Index and introduction of CWIS. In the workshop, USAID IUWASH Tangguh will facilitate the LGs in developing the shit flow diagram and familiarization of wastewater flows to environment, the local stakeholder will discuss how to intercept the direct waste flow to environment. The citywide inclusive sanitation will be promoted to map out which part of the city will rely on individual on-site systems including LLTT, LLTTT, on-call basis, and which parts of the city will be directed to sewerage system. USAID IUWASH Tangguh will be collaborating with The World Bank Team of CWIS in facilitating selected LGs in CWIS tools introduction.

Exhibit below describes the PYI activities, associated outputs and timeline of Objective 2b Sanitation Sector implementation.

Exhibit 15. Objective 2b PY1 Activities	and Timelines								
			YEAR I TIMEFRAME						
SUB-TASK	INPUTS	OUTPUTS	APR	MAY	NOÍ	JUL	AUG	SEP	YEAR 2 (CONT'D)
Task 2.1.1. Apply workforce development framework to support service providers  • Consultation meeting with BTS, Sanitation Directorate, and FORKALIM	LTTA, STTA Meeting, workshop	agreement on collaborative activity							

Exhibit 15. Objective 2b PY1 Activities a	and Timelines								
					YEAR	I TIM	1EFRA	ME	
SUB-TASK	INPUTS	OUTPUTS	APR	MAY	NOL	JUL	AUG	SEP	YEAR 2 (CONT'D)
Task 2.2.1 Develop portfolio approaches to improving operational and financial efficiencies  collecting and data analyses of safely managed sanitation coverage, existing operator of wastewater in LG, capacity of IPLT	LTTA Meetings, workshop	Mapping of sanitation institution, IPLT							
Task 2.3.1 Expand menu of service model for PDAM and LG integration and adoption  Identification of climate risk and climate adaptation concept to sanitation programs  Preparation of sanitation resilience for capacity building of internal USAID IUWASH Tangguh team	LTTA Workshop	Climate risk and adaptation concept in place							
Task 2.4.1. Support adoption of novel data systems by service providers  Review and update index parameters  Review and update guideline of Sandex  Capacity building of USAID IUWASH Tangguh regional team on how to facilitate Sandex in local government	LTTA Meeting, workshop	Index parameters accepted by partner							

## 3.4. OBJECTIVE 3 IMPROVED WATER RESOURCES MANAGEMENT TO SUPPORT RESILIENT DRINKING WATER SERVICES

Improved WRM to Support Climate-Resilient Drinking Water Services centers on ensuring and improving the provision of raw water for water supply. Sustainable water supply requires sustainable provision of raw water sources. WRM programming will include filling the gaps of inter-relating technical, institutional, and financial issues that involve water utilities (PDAM), WRM agencies, government, private sector, and community. Overall Objective 3 aims to improve enabling factors (60 policies on WRM), management information system (40 institutions), scientific basis for planning and decision making (35 vulnerability assessment reports), financing for climate change adaptation (USD 10 million), WRM capacity in addressing climate risks (100 institutions), and people's benefit from WRM (300,000 people). To get more impactful results, the Objective 3 team will work very closely with the three other Objectives as there are lots of opportunities for collaboration, synergy, joint programming, and multiple contributions to outputs and outcomes. In addition, across the Objective 3 targets and their respective activities, USAID IUWASH Tangguh will ensure that GESI

strategies are fully integrated by including participation, access, control, and benefit aspects into all activities.

In PYI, Objective 3 activities will mainly focus on assessing various aspects of WRM and building partnerships with key stakeholders both at national and regional levels. The assessment will focus on identification of watersheds that PDAMs rely on for their raw water sources including initial identification of climate risks impacting these raw water sources. More specifically this will include delineation of watersheds, identification of the land use of the watersheds, identification of institutions in charge of the watershed management, and identification of communities living in and depending on the watersheds.

Delineation of watersheds will be carried out using GIS (Geographic Information System) and spatial maps that may be accessed through open source platforms. The delineation will see contour lines in the topographical maps where runoff flows to the same direction downstream. The delineation will start from the intake location of raw water used by PDAM moving upstream so that each intake location will have its specific watershed. The delineation will also see geological/hydrogeological aspect of the watershed that will inform technical options for groundwater recharge and conservation.

USAID IUWASH Tangguh will initially inform stakeholders of the priorities of Objective 3, to raise awareness on the importance of resilient water resource management and get their inputs and consent for proposed activities. While USAID IUWASH Tangguh will hold a series of socializations more broadly, the Objective 3 team will follow up with more focused engagement with key WRM stakeholders to identify and agree on more WRM specific issues for collaboration.

The engagement process will identify common areas where USAID IUWASH Tangguh may align with the roles and responsibilities of the stakeholders. It is expected that the engagement can be formalized in the form of Memorandum of Understanding (MoU) that includes a joint plan as well as resource sharing arrangement between USAID IUWASH Tangguh and key stakeholders.

#### PARTNER COLLABORATION 3.4.1.

The collaboration will include key stakeholders in charge of management of spring, surface water, groundwater, landscape (forested and non-forested area), land management agency, local government, and other related institutions and organizations who are key in WRM programming more broadly. The collaboration will include coordination, data/information sharing, joint planning, implementation, and monitoring-evaluation that are focused on protection and improvements of watershed/catchment areas. USAID IUWASH Tangguh will engage the partners from the beginning of PYI.

Exhibit 16. Objective 3 Key Partners									
Partner	The activity								
Ministry of Environment and Forestry (Kementerian Lingkungan Hidup dan Kehutanan-KLHK)	Coordination and collaboration in catchment area protection and rehabilitation								
Ministry of Public Works and Housing (PUPR)	Coordination and collaboration in raw water resources programming								
BMKG	Data sharing on climate projection, collaboration in climate & weather data dissemination								
Perum Jasa Tirta	Joint programming and implementation aimed at provision and protection of surface water								

Exhibit 16. Objective 3 Key Partners								
Partner	The activity							
Provincial and district/city Bappeda	Collaboration and alignment in programming in sectors of water resources, forestry, catchment area, land rehabilitation							
Provincial Forest Service	Data/information sharing on land rehabilitation programming							
Provincial water resources agency	Joint programming on protection of watershed/catchment area							
Balai Pengelolaan Daerah Aliran Sungai-BP DAS	Joint programming and implementation of catchment area protection							

#### 3.4.2. ACTIVITY INTEGRATION

Objective 3 team will initially focus on the concept, approach, and targets that will then be discussed and synchronized internally with other Objectives Teams within USAID IUWASH Tangguh. The integration is to ensure that every aspect of USAID IUWASH Tangguh is addressed in any activity. Objective 3 team will undertake discussions with the other Objectives Teams from the planning stage.

The key integration will be identifying and linking WRM activities with the availability and sustainability of raw water for urban drinking water. At the district/city level, USAID IUWASH Tangguh will discuss with the PDAMs on type and number of raw water sources used by the PDAM, e.g. spring, ground water, and/or surface water. Objective 3 team will work with Objective 2 team to discuss with PDAM particularly on raw water issues. USAID IUWASH Tangguh will then develop a delineation of catchment area of each raw water source used by the target PDAMs. Based on the delineation, programming will focus on improving water resource management within each catchment area that mainly includes type of land use, institutions in charge of the catchment area, and communities within and surrounding the catchment area. These data and information will be used for identifying, among others; key stakeholders, possible technical programming, and engagement of community.

As WRM activities will require funding, Objective 3 Team will work with other Objective teams to identify projects that can be proposed for funding from potential initiatives, e.g., BPDLH (Badan Pengelolaan Dana Lingkungan Hidup) as well as the private sector. During PYI, USAID IUWASH Tangguh will start identifying the opportunities that may be implemented throughout the project. In parallel, USAID IUWASH Tangguh will also identify financial capacity of related ministries at the national and local government agencies on WRM activities. As such, Objective 3 team will work very closely with Objective I team.

Objective 3 will integrate gender and social inclusive consideration into its programming from an early stage, e.g., segregated data of event participant and participation. Women's participation and leadership will be encouraged throughout all activities. To ensure integration of GESI, Objective 3 team will work closely with Objective 4 team.

#### 3.4.3. TASK BY TASK DETAILED DESCRIPTION

In PYI, the focus will be on tasks that are needed to initiate Objective 3 programming for the duration of the project. The initial activities will include all the Outcomes that focus on selected tasks and activities.

Outcome 3.1 will commence with Task 3.1.1 and 3.1.2 that serve as the foundation for building partnership and identification of physical characteristics and connection between WRM and WASH on the ground.

# Task 3.1.1 - Raise awareness of the impact of climate change on water availability for watershed stakeholders including national and local government, communities, utilities, and private sector

Raising awareness is the first step of USAID IUWASH Tangguh engagement with stakeholders. USAID IUWASH Tangguh will prepare materials for this purpose that detail the importance of WRM, more specifically the dependence of WASH on WRM, threats (in particular climatic threats) facing WRM, and the importance of investing in improved WRM. The awareness raising will be conducted through a series of stakeholder consultations that primarily include key government and local government agencies. Data, knowledge, and practices identified from the series of the consultations among others will be used as reference for: a) SBC strategy development (4.1.1) and b) approach for campaigning and key stakeholder (4.2.2).

In PYT USAID IUWASH Tangguh will identify critical natural infrastructure that supplies water to PDAMs, e.g. delineation and mapping of watershed and recharge areas of raw water resources used by PDAMs. This activity will involve local government, PDAMs, and universities as part of building their capacity so that they will be able to independently do similar work in the future. Delineation and mapping of watershed will inform options for technical intervention that will further be consulted the stakeholders. Selection of the intervention will be aligned with each stakeholder's interest and availability of resources.

# Task 3.1.2 - Map upstream water systems, downstream consumption patterns, and potential pollution sources, and prepare climate-resilient water resource vulnerability assessments and action plans

In PYI USAID IUWASH Tangguh will identify critical natural infrastructure that supply water to PDAMs, e.g., delineation and mapping of watershed/recharge areas of raw water resources used by PDAMs. The delineated watershed/recharge areas will provide initial information of type of land use, authorities in charge, stakeholders, and also communities. This activity will involve local government, PDAMs, and universities as part of building their capacity so that they will be able to do similar works in the future.

Upon delineation of the watershed/recharge areas, further activities will include getting climateweather information of the watershed. For planning purpose, down-scaled climate projection data will be sought from meteorological agency (e.g., BMKG station). The data is important as an indication of climate hazards that may include consecutive dry day, temperature, and rainfall changes. Combined with other data, the climate projection will be used for development of the vulnerability assessments as well as the action plans. The plans will include priority activities for the short run implementation, e.g., following year plan, and longer term activities.

# Task 3.1.3 – Promote private sector investment into WRM activities to protect natural assets and invest in green infrastructure

USAID IUWASH Tangguh will seek collaboration with the private sector on protection of watershed in USAID IUWASH Tangguh assisted areas building on previous private sector initiatives under USAID IUWASH PLUS and USAID APIK projects such as Coca-Cola, Nestle, and Cargill as well as identifying new opportunities with other private corporations. The activities will include:

- Assessment of private sector landscape particularly on WRM
- Prepare practical communication materials to inform and private sector on WRM initiative
- Roadshow to potential private sector partners both at national and regional levels
- Reach out to CSR forum to gauge potential private sector investment with local government engagement
- Develop concept on private sector initiative in WRM activities

# Task 3.1.4 - Implement and manage protection measures for watershed catchment areas to conserve biodiversity and water sources and improve sustainable water services

USAID IUWASH Tangguh will work with government, business, and communities on watershed protection activities that have direct link to provision of raw water for PDAM services. In certain locations, USAID IUWASH Tangguh will work with quasi government bodies, such as Jasa Tirta I who has mandate in operation and maintenance of water resources infrastructure. Activities under this task will include:

- Operationalization of the concept and plan developed under Task 3.1.3 to implementation mode, e.g. identifying appropriate technical option for effective watershed protection
- Support implementation of WRM activities on technical aspect, community engagement, monitoring-evaluation, and reporting
- Ensuring the specifications and quality of the works are acceptable
- Support for replication in other locations

# Task 3.1.5 - Build capacity of local workforce to carry out watershed management activities such as construction of infiltration wells, improved sloping and management

As part of building sustainability, USAID IUWASH Tangguh will engage local workforce and build/improve their knowledge and skill on watershed protection activities. Their engagement will start from the early stage of planning of field activities where they are encouraged to provide input. USAID IUWASH Tangguh will also provide training on technical topics on types of measures that will be implemented. Activities under this task may include:

- Work with local PDAM, local government, and universities to develop capacity building programs on WRM activities
- Conduct ToT, training of trainers, to build and provide pool of trainers for WRM activities
- Conduct training on WRM measures
- Support certification of trainers
- Explore opportunity to link with government and private sector programs on WRM

In PYI Outcome 3.2 will implement Task 3.2.1 to build or strengthen WRM committee that will foster a climate-resilient WRM for providing sustainable raw water for WASH.

# Task 3.2.1 Establish or strengthen inclusive WRM committees including local government, private sector, communities, and utilities

USAID IUWASH Tangguh will hold a series of stakeholders' consultations to identify existing WRM committee members, their respective roles and responsibilities, their program activities, and potential collaboration across actors. The potential collaboration will center on how existing WRM programming contributes to sustainability of raw water for WASH. If the committee is not yet in place, USAID IUWASH Tangguh will discuss with the stakeholders the importance of the WRM committee to help address WRM issues. Identification of the WRM committee will be used to build or strengthen a platform for communication-coordination in addressing WRM issues, more particularly in its relation to WASH services. Membership of the WRM committee will focus on those involved or in charge in each respective watershed already delineated in prior activities.

# Task 3.2.2 Provide awareness-raising and training for government officials and WRM stakeholders on gender equity and inclusion, including gender-responsive budgeting

USAID IUWASH Tangguh will hold trainings primarily for government officials on GESI in the context of WRM. The trainings are important to build awareness and further adoption of GESI principles into planning and budgeting to ensure that participation, access, control, and benefit are well addressed. To implement the trainings, USAID IUWASH Tangguh will work with the Ministry of Women's Empowerment and Child Protection and related local government agencies. The preparation and implementation of the awareness-raising and training programs will include:

- Consultation with the Ministry of Women's Empowerment and Child Protection to identify regulation, guidance, tools on GESI, and potential collaboration in awareness-raising and training programs
- Identifying target audience for awareness-raising and training programs in respective watersheds in the region
- Engage local government agency in charge of GESI to get engage in the trainings plan
- Implement awareness-raising and training programs
- Evaluation of effectiveness of the training

# Task 3.2.3 Ensure that relevant WRM information and data are publicly available, including production from springs and water usage statistics

WRM data and information are important as a reference for public in general and also for PDAM planning. For instance, if a PDAM is well informed in advance that there would be a long drought, then PDAM may inform their customers to use the water more efficiently. USAID IUWASH Tangguh will work with institution and organization who produce and distribute the data and information. Activities under this task will include:

- · Work with local government and PDAM to identify data and information that are available and can be shared publicly
- Identify type of effective dissemination of the data and information to public in general and other users

- Support the data-information producers for dissemination, e.g. through website, dashboards, climate and weather information system (CWIS) display
- Monitor effectiveness and usefulness of provision of such data and information

# Outcome 3.3 Expanded information, analysis, and advocacy for climate-resilient decision making in policy, programs, and operation

In PYI, USAID IUWASH Tangguh will start the Outcome 3.3. with Task 3.3.3 that will engage local community in WRM protection. Local community will serve as an addition of stakeholders' participation in the efforts particularly taking into account that many communities live in and depend on the watershed.

# Task 3.3.1 In partnership with BMKG improve quality and accessibility of climate information and promote applied messaging for WRM decision makers

Effective WRM will need weather and climate data and information for planning of various stakeholders, particularly those in charge of and related to WRM. On the ground there are typically river management agencies and watershed management agencies. IUWASH will work with these entities as well as with PDAMs and communities to identify their needs of weather and climate data and information. Activities under this task will include:

- Work with river management and watershed management agencies to identify their needs on weather and climate data and information
- Support BMKG in production and dissemination of the needed weather and climate data and information
- Collaborate with BMKG to provide training on how users (river management agency, PDAM, and others) can access and understand the weather and climate data and information

# Task 3.3.2 Provide PDAMs with a real-time groundwater and surface water monitoring information system

To improve PDAMs response to fluctuation of capacity of their raw water resources, PDAMs need to have information on its raw water sources. This information will help PDAM operation to be more adaptive in terms of sustaining its services. For instance, if there is an indication that the groundwater capacity of their raw water source is significantly and constantly diminishing over time, then the PDAM may need to invest in strategies that prevent that decline or to find more reliable source of raw water in the longer term. Activities of Task 3.3.2 will include:

- Identification of types and locations of raw water used by PDAM
- Discussion with PDAM how groundwater and surface water monitoring will be developed and how it will be integrated into PDAM production facility
- Development of monitoring system appropriate to PDAM
- Engage local community to support operation and maintenance of the monitoring system

# Task 3.3.3 Develop and equip a citizen scientist program to raise awareness of WASH/WRM data use and monitor water quality and quantity

Objective 3 team will research community participation in WRM from various references, lessons learned, and experience. USAID IUWASH Tangguh will look into the "waterkeeper" organization in the United States. This information will be used to address key questions that, among others, include who from the community should be engaged, how they are engaged, what USAID IUWASH Tangguh could support, and what results should be achieved.

In parallel, USAID IUWASH Tangguh will identify locations of communities that USAID IUWASH Tangguh will work in, who will be engaged from each community, e.g. local leader, youth, cadre, women. Identification and selection of the community members to become citizen scientist will be based on delineation of the watershed so that their engagement in the use and monitoring of water quality and quantity data is important to them. For instance, if the capacity of a river stream is lower in a long period during a dry season, then they need to take a more proactive anticipation for the coming years. The identification will also include potential establishment or engagement of local CSO so that they will become facilitators and a catalyst of formation as an effective citizen scientist.

To foster a transformative WRM particularly for more sustainable provision of raw water for WASH, Outcome 3.4. will start with Task 3.4.1 that will focus on identification of gaps, overlapping, and opportunity to improve current WRM enabling factors. This outcome will be heavy on identification and development of regulatory and institutional frameworks across WRM and WRM-WASH issues.

## Task 3.4.1 Conduct gap analysis in policies and regulations for improved watershedlevel WRM

USAID IUWASH Tangguh will engage local experts familiar with technical-substantive issues as well as regulatory and institutional issues. For this, USAID IUWASH Tangguh will collaborate with local universities and/or other research institutes. In PYI, the collaboration will identify gaps and/or redundancies and recommendations for streamlining approaches to WRM. Upon this identification, USAID IUWASH Tangguh will consult with stakeholders to get their input and consent that are important for further steps, e.g., improvements on WRM policy and regulation either in a specific watershed or more broadly across neighboring jurisdictions.

# Task 3.4.2 Strengthen the enabling environment for watershed management and improve WRM capacity for upstream and downstream users

Improving the enabling environment begins with building awareness, particularly on the potential impact of climate change to WRM. USAID IUWASH Tangguh will work with key WRM stakeholders as well as local government in ensuring that the enabling factors are in place. This includes provision of WRM regulation, policy coordination among stakeholders, and incentives that encourage WRM efforts across actors. The task will include:

- Raise awareness of key WRM stakeholders including communities living and relying on watershed
- Assess obstacles that hinder collaboration among actors
- Discuss with local governments on potential cross administration collaboration
- Support in developing or improving policy to promote collaboration across sectors and actors

Exhibit below provides summary of detailed activities implemented in PYI.

Exhibit 17. Objective 3 PY1 A	ctivities and Timeline	es							
					YEAR	I TIM	IEFRA	ME	
TASKS	INPUTS	OUTPUTS	APR	MAY	NOL	JUL	AUG	SEP	YEAR 2 (CONT'D)
Task 3.1.1 Raise awareness of the impact of climate change on water availability for watershed stakeholders including national and local government, communities, utilities, and private sector  Develop materials for awareness raising building on materials in hands and (updated) data/ information	FGD/meetings, LTTA	Materials for stakeholders' consultation							
Series of stakeholder consultations with key government and local government agencies	Meetings, LTTA	Consultations and dialogues are conducted. Potential solutions are identified.							
Incorporation of data, knowledge, and practices from the consultation into: a. SBC strategy development (4.1.1) and b. approach for campaigning and key stakeholder (4.2.2)	Meetings, LTTA	Data, knowledge, and practices gathered and documented							
Task 3.1.2 Map upstream water systems, downstream consumption patterns, and potential pollution sources, and prepare climateresilient water resource vulnerability assessments and action plans  • Support LGs, PDAMs, and universities to improve mapping of water system and consumption patterns	FGD/meetings, LTTA	Identification of critical natural infrastructure that supply water to PDAMs, e.g. delineation and mapping of watershed/rechar ge areas of raw water resources used by PDAMs							

Exhibit 17. Objective 3 PY1 A	5								
					YEAR	I TIM	IEFRA	ME	
TASKS	INPUTS	OUTPUTS	APR	MAY	NOL	JUL	AUG	SEP	YEAR 2 (CONT'D)
Task 3.2.1 Establish or strengthen inclusive WRM committees including local government, private sector, communities, and utilities  • Stakeholder consultation to identify existing WRM committee (if any) and get the stakeholder's consent on WRM establishment/ strengthening	FGD/meetings, LTTA	List of existing (or potential) WRM committee members							
Develop platform for the committee to engage regularly with LG	FGD/meetings, LTTA	Platform for communication- coordination among committee members							
Task 3.3.3 Develop and equip a citizen scientist program to raise awareness of WASH/WRM data use and monitor water quality and quantity  • Desk review of the "waterkeeper" organization in the US	Desk review/FGD, LTTA	Lessons learned on formation and operation of the "waterkeeper" in the US							
Identification and selection of local watershed and the community	Desk review, field observation/ survey, FGD, LTTA	List of communities living and relying on the watersheds							
Facilitate the formation of CSO on local watersheds protection	FGD/meetings, LTTA	Formation of or strengthened CSO							
Task 3.4.1 Conduct gap analysis in policies and regulations for improved watershed-level WRM  • Engage local expert from universities to analyze existing regulations and policies regarding WRM	FGD/meetings, LTTA	Identification of gaps and/or redundancies and recommendations for streamlining approaches to WRM							
Consultation with stakeholders	Meetings, LTTA	Stakeholders' input and consent on needs to have more streamlined							

Exhibit 17. Objective 3 PY1	Activities and Timeline	es								
			YEAR I TIMEFRAME							
TASKS	INPUTS	OUTPUTS	APR	AAM	NOÍ	IUL	SUA	SEP	YEAR 2 (CONT'D)	
		WRM to sustain								
		raw water supply								

# 3.5. OBJECTIVE 4. INCREASED ADOPTION OF BEHAVIORS AND IMPROVED WOMEN'S PARTICIPATION AND LEADERSHIP ROLES THAT CONTRIBUTE TO IMPROVEMENTS IN WASH AND WRM

Social Behavior Change (SBC) has proven an effective element of successful WASH and WRM programs. In the WASH sector, infrastructure alone will not significantly improve both WASH and WRM conditions. Sufficient WASH facilities and WRM conditions should be supported by sustainable behaviors. As an example, the use of toilets and hygiene practices has a strong correlation with the management of water resources to assure the availability of clean water.

USAID IUWASH Tangguh, under Objective 4, will increase the adoption of behaviors and improve women's participation and ascension into leadership roles by combining SBC activities and GESI approaches. The major activities under Objective 4—community engagement, media engagement, and media and social media advocacy—will be designed to increase awareness of WASH and WRM that include general knowledge, financing opportunities, vulnerability; and to encourage public participation to improve WASH and WRM conditions. Under Objective 4, USAID IUWASH Tangguh will increase awareness of one million people of the important of WASH and WRM sectors; ensure that 30% of households in the target area have soap and water at a handwashing station commonly used by family members; and ensure that 20% of program participants report increased agreement with the concept that males and females should have equal access to social, economic, and political resources and opportunities. The Objective 4 team will also support progress against other objectives' targets through implementation of the GESI Action Plan and SBC activities both at community and institutional levels.

In PY I, the team will focus on the development of the SBC strategy, communication plan, and GESI strategy, engagement with GOI, assessing potential communication channels and conducting community/hotspot selection. Objective 4 will also be actively involved in the adjustment of Government Index, Sanitation Index and PDAM Index used by USAID IUWASH PLUS project to ensure the integration of GESI into the indices.

To implement its activities, the Objective 4 team will work closely with the GOI to establish collaboration towards increasing WASH and WRM awareness and the use of a GESI lens to assess opportunities and constraints to improving WASH and WRM conditions. The specific activities to accelerate GESI integration into program implementation are detailed under the section on GESI Programming below.

USAID IUWASH Tangguh will collaborate with provincial and local governments to conduct SBC activities and facilitate engagement of the broader target community to actively provide input and active participation in the Musrenbang process. We will build on our previous "Tetangga Panutan" message as well as expanding messaging targeting non-households, and new areas including WRM

and climate change. Further, the project team will engage the same partners to mainstream GESI through awareness raising, capacity building and the development of gender responsive budgeting and planning (GRBP).

#### 3.5.1. PARTNER COLLABORATION

The USAID IUWASH Tangguh Objective 4 team will work closely with partners at national and local levels, including Bappenas, Ministry of Health (MOH), Ministry of Administrative and Bureaucratic Reform (MABR), Ministry of Communication and Information Technology (MCIT), Ministry of Women Empowerment and Child Protection (MWECP), Ministry of Public Works (MOPW), Ministry of Home Affair (MOHA), donors, NGOs, development programs, media and influencers. The national government will provide support and endorsement while provincials and LG partners will work closely with the team and provide input for program implementation at the city and district levels. The USAID IUWASH Tangguh objective 4 team will collaborate with donors, NGOs, development partners, media and influencers for advocacy work and to lead national campaigns for WASH and WRM.

In PYI, The Objective 4 team will work closely with the MOH on the development of an SBC strategy and continue the use of Tetangga Panutan to promote WASH behaviors developed under USAID IUWASH PLUS. The team will also work with Bappenas to secure their input on the development of SBC and GESI umbrella concept. To develop a gender assessment and action plan, USAID IUWASH Tangguh will work with the Ministry of Women Empowerment and Child Protection and will also seek their input in our efforts to ensure gender mainstreaming across overall project implementation. USAID IUWASH Tangguh will also engage MABR and MCIT to review the potential communication channels and platforms to promote WASH and WRM as well as to facilitate accountable and inclusive citizen engagement mechanisms.

USAID IUWASH Tangguh will also work at the provincial and cities/district level to engage with other donors, development programs and NGOs to assess potential collaboration and hotspot selection, targeting poor communities.

In the exhibit below, we identify key institutional partnership necessary to the implementation of activities under Objective 4 in PYI.

Exhibit 18. Objective 4 Key Partners									
Partner	The activity								
Bappenas	Close coordination to get input for SBC and GESI umbrella concept								
МОН	Collaboration to get input and endorsement for the SBC Strategy and Action Plan, and Broadcast Tetangga Panutan								
MABR	Engage with MABR to review potential communication channels and platform to monitor accountability and inclusivity								
MCIT	Engage with MCIT to review potential communication channels and collaboration to develop WASH and WRM contents								
MWECP	Engage with MWECP to get input and endorsement for Gender Assessment and Action Plan								
Provincial Health Office	Coordination and collaboration to support and enrich SBC program implementation								
District/City Health Office	Close collaboration to select hotspot location and Input for SBC program implementation and hotspot selection								
Donors, NGOs and development programs	Engage with other development programs and assess potential collaboration to promote WASH and WRM. Such programs may include those of Wahana Visi Indonesia, Yayasan Plan								

Exhibit 18. Objective 4 Key Partners									
Partner	The activity								
	Indonesia, SNV, SIMAVI, YPCII, Water.Org, Unicef, DFAT, Yayasan KEHATI, USAID SEGAR etc.								
Media, influencers	Engage with national media and social media influencers to assess potential collaboration to promote WASH and WRM								

#### 3.5.2. ACTIVITY INTEGRATION

Objective 4 will be implemented in close collaboration with other Objective leads as follows:

- Objective 4 will support Objective 1 to build sector capacities and create/expand mechanisms to promote social accountability and inclusivity.
- The support for Objective 2 includes inputs into a workforce development framework for service providers and expansion of WASH and WRM service models through a consultation process with communities.
- The support for Objective 3 will include efforts to raise awareness of the impact of climate change on water availability for watershed stakeholders especially communities; and awareness raising and training for government officials and WRM stakeholders on gender equity and inclusion, including gender responsive budgeting and integration of GESI concerns into WRM policies and budgeting.

Objective 4 will benefit from support from other objectives in USAID IUWASH Tangguh's efforts to integrate GESI considerations into WASH and WRM regulation and activities. Specifically, Objective 4 will receive support from Objective 1 to establish GRBP regulation and KPIs; Objective 2 on design of inclusive WASH facilities, improvement of women's knowledge and skills to manage WASH facilities and ensuring cities/districts implement improved desludging services.

The implementation of PYI will focus on assessment of potential collaboration with partners at national and sub national levels, and hotspot selection. Objective 1, Objective 2 and Objective 3 will support hotspot selection by providing technical data related to potential household connection for water, access to sanitation facilities, correlation of the location with PDAM water resources and potential support from the private sector through CSR programs and MFI.

#### 3.5.3. TASK BY TASK DETAILED DESCRIPTION

#### Task 4.1.1 Develop SBC strategies targeted to sustainable sanitation systems

Understanding that SBC is an important element for the improvement of WASH and WRM, especially for increasing latrine use, maintenance, and desludging behaviors and to enable adoption of these behaviors, USAID IUWASH Tangguh will develop an SBC strategy to guide implementation over the LOP. The strategy will be developed in collaboration with MOH and in coordination with Bappenas, MOPW and other related technical ministries. USAID IUWASH Tangguh will also work with other donors and development partners to gather input and enrich the SBC strategy. Implementation of the strategy will be evaluated and adjusted accordingly over the LOP.

During PYI, USAID IUWASH Tangguh Objective 4 will work closely with MOH to gather input for the SBC strategy. While the consultation process with other ministries, donors and development

programs will be continued on PY2, USAID IUWASH Tangguh will start the engagement on PY1 as part of the startup of collaboration the relevant ministries (MOH, MWPW, MOHA, MWECP), donors (DFAT, World Bank) and development programs (Unicef, WHO, WFI, Plan Indonesia, etc.).

#### Task 4.1.2 Increase Household Demand for WASH Services

Household demand for WASH services will create conditions for the improvement of WASH access and WASH services itself. While outputs of SBC activities will be increasing knowledge, the primary aims of the activities are to create demand and to empower communities to be able to advocate better WASH services. USAID IUWASH Tangguh SBC activities will focus on the engagement and empowerment of community members—building their capacity and confidence in their ability to analyze WASH and WRM conditions, develop and implement actions plan to achieve better WASH and WRM conditions and engage key stakeholders to advocate for improved WASH access and services. Through SBC activities, USAID IUWASH Tangguh aims for the adoption of positive practices towards the use of toilets, handwashing with soap, regular desludging and the management of water resources, and furthermore contributes to more equitable and inclusive societies.

Understanding that increasing knowledge is not enough to change behavior, USAID IUWASH Tangguh Objective 4 will work closely with community members to build their capacity to analyze WASH and WRM issues, develop action plans and engage key stakeholders to improve WASH services and WRM.

During PYI implementation, USAID IUWASH Tangguh Objective 4 will identify and assess the potential community/hot spot locations. Hotspot selection will be determined by analysis of existing the PDAM piping network, number of households practicing open defecation, and correlation with water resources. USAID IUWASH Tangguh will utilize community groups, namely Money (M&E) Teams established by USAID IUWASH PLUS. The project will train and provide mentorship to Money Teams, who will do the same for the USAID IUWASH Tangguh selected community/hotspot locations. For new cities and districts that lack Money Teams, the USAID IUWASH Tangguh team will collaborate with the LGs, donors and development programs in the respective locations to build Money Teams.

## Sub-task 4.1.2.2 Engaging enterprises to support household WASH access

While the demand for WASH service is critical to improve WASH access, it is also important to ensure that there are local enterprises to respond to the increased demand.

In PYI, USAID IUWASH Tangguh will begin identifying potential enterprises in target sites and engage them to provide products and services. The support for enterprises will include specific attention to female entrepreneurs. Objective 4 will also collaborate with Objective I and Objective 2 to encourage the development of inclusive WASH facilities.

## Task 4.2.1 Develop an SBC campaign for payment for water and sanitation services

Demand creation for the WASH services should be complimented by the willingness to invest for the facilities and willingness to pay for WASH services. In order to communicate with the target audience and influence their behavior, USAID IUWASH Tangguh will engage key stakeholders to conduct an SBC campaign and advocate for people to pay for water and sanitation services.

SBC campaigns will be crafted to build a willingness to pay for the services. USAID IUWASH Tangguh will utilize "being a good neighbor" also known as Tetangga Panutan, developed under USAID IUWASH PLUS, as the umbrella message to promote WASH and WRM.

# Sub-task 4.2.1.1 Utilization of #TetanggaPanutan and development of key behaviors to support WRM campaign (in addition to the existing WASH key behavior)

During PYI, USAID IUWASH Tangguh will continue the use of Tetangga Panutan as the key message umbrella message WASH and explore possible key messages for WRM initiatives. To develop the campaign around WRM, USAID IUWASH Tangguh will engage upstream LGs and partners; assess WRM condition to understand the context and issues to be mobilized under the campaign; and develop key and strengthen key messages through consultation with MEF, MOH, and other related stakeholders.

## Sub-task 4.2.1.2 Development of SBC materials

USAID IUWASH Tangguh will develop education- and promotion- oriented SBC materials in a range of formats that include, printed and digital brochures, posters, public service announcement (PSA), content for edutainment activities and other creative media designed to most effectively reach the target audience. USAID IUWASH Tangguh will work closely with MOH and will follow the standard process to develop SBC materials which include defining the message, pre-testing and finalization of the materials.

## Sub-task 4.2.1.3 Development of marketing and promotion strategy to improve WASH services

The USAID IUWASH Tangguh team has observed that PDAM staff are prone to focusing primarily on the technical aspects of delivering WASH services, while the promotion and marketing of services to potential customers is often left behind. USAID IUWASH Tangguh will support PDAM development of marketing strategies focused on customer engagement. In PYI, USAID IUWASH Tangguh will focus on assessing the existing capacity of water and sanitation operators. This activity will serve as the foundation to develop the capacity building program, market map and the marketing strategy for water and sanitation operators that will be implemented in PY2.

### Task 4.2.2 Engage different media channels, influencers, and content providers

Understanding that not all of the USAID IUWASH Tangguh target audiences may be reached through mass media due to literacy, age, internet access and other factors, USAID IUWASH Tangguh will engage a range of media channels to broadcast WASH and WRM messages. This will build awareness and furthermore create a movement that leads to adoption of behavior change and the shifting of new social norms that contributes to better WASH and WRM conditions.

Among other interventions and media channels, USAID IUWASH Tangguh will engage and collaborate with influencers and content providers to develop WASH and WRM content and broadcast it through their social media accounts. By working closely with influencers and content providers USAID IUWASH Tangguh will attract more people and will better amplify the message to improve WASH and WRM conditions.

## Task 4.3 Accelerate gender integration and women's agency in WASH and WRM sectors

USAID IUWASH Tangguh will integrate GESI considerations across program implementation with a focus on women involvement, improving knowledge and capacity building, and encouraging women leadership and decision making, both at community and institutional levels. To accelerate gender integration and women's agency in WASH and WRM, and to guide project activities, USAID IUWASH Tangguh is finalizing a GESI strategy and action plan. More detailed explanations of the activities will be presented in the GESI programming section.

The exhibit below features a PYI timeline for activities under Objective 4 Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements in WASH and WRM.

Exhibit 19. Objective 4 PY1 Activities and Timelines										
					YEAR	IIT I	1EFRA	ME		
SUB-TASK	INPUTS	OUTPUTS	APR	MAY	NOL	JUL	AUG	SEP	YEAR 2 (CONT' D)	
Task 4.1.1 Develop SBC stra	tegies targeted to su	stainable sanitation syst	ems							
Development of draft concept SBC strategy and action plan	workshop, FGD LTTA	Draft SBC Strategy and Action Plan								
Consultation with MOH	workshop, FGD LTTA	Input from MOH								
Task 4.1.2 Increase househol	d demand for WASH	d services		•						
Task 4.1.2.1 Community engagement and empowerment to analyze WASH and WRM issues and develop action plan as well as engaging key stakeholders  Identification of potential hot spot location	workshop, FGD LTTA	List of potential hotspot both for WASH and WRM location								
Community assessment and hot spot selection	Field visit, FGD, LTTA	Data and information, indicator of potential hotspot including local leaders, WASH and WRM condition etc.								
Task 4.1.2.2 Engaging enterprises to support household WASH access	FGD, LTTA	List of potential enterprises								

Exhibit 19. Objective 4 PY1 A	Activities and Timelin	es							
·					YEAR	I TIN	1EFRA	ME	
SUB-TASK	INPUTS	OUTPUTS	APR	MAY	NOL	JUL	AUG	SEP	YEAR 2 (CONT' D)
Identifying potential enterprises to provide WASH services									
Task 4.2.1 Develop an SBC c	ampaign for payment	for water and sanitation	on servi	ices					
Task 4.2.1.1 Utilization of #TetanggaPanutan and development of key behavior to support WRM campaign (in addition to the existing WASH key behavior)  • Engaging LGs and partners to promote Tetangga Panutan	FGD, LTTA	Commitment and action to promote Tetangga Panutan							
Assessing WRM condition to understand the context and issues	FGD, STTA	Existing WRM condition							
Development of key message under umbrella of #TetanggaPanutan to promote WRM including in consultation with Ministry of Environment and Forestry, MOH, and gathering input from other related stakeholders	Workshop, FGD, STTA, PO	Key message to promote WRM							
Task 4.2.1.2 Development of SBC materials	PO, LTTA								
Development of SBC material		SBC materials produced							
Distribution of SBC materials	PO, LTTA	SBC materials distributed							
<ul> <li>4.2.1.3 Development of marketing and promotion strategy to improve WASH services</li> <li>Assessment of water and sanitation operators, that include coverage of the service and marketing plan</li> </ul>	PO, LTTA	Data service coverage and availability of marketing plan							

Exhibit 19. Objective 4 PY1 Activities and Timelines										
					YEAR	I TII	1EFR/	ME		
SUB-TASK	INPUTS OU	OUTPUTS	APR	MAY	NOL	JUL	AUG	SEP	YEAR 2 (CONT' D)	
Task 4.2.2 Engage different m	nedia channels, influ	encers, and content pro	viders	I	I	I				
Task 4.2.2.1 Engagement of media and communication channels  Development of Communication plan	Workshop, FGD LTTA	Communication plan								
Consultation with     Kominfo and PANRB to     engage communication     channels and the     development of     accountability and     inclusivity platform	STTA, LTTA	Input for communication channels and the development of accountability and inclusivity platform under Objective I								
Identify potential media and communication channels, including influencers and content creators	FGD, LTTA	List of Identify potential media and communication channels.								
Assessment potential collaboration with identified media and communication channels, including influencers and content creators	FGD, LTTA	Potential collaboration with identified media and communication								
Task 4.2.2.2 Collaboration with national and local media (collaborative program to promote WASH and WRM that also integrate with GESI)  • Assessment potential media	FGD, LTTA	List of potential media								

## 3.6. GESI PROGRAMMING

As outlined earlier in Objective 4, USAID IUWASH Tangguh will integrate GESI initiatives across all project objectives and activities to improve WASH and WRM through capacity building for water and sanitation operators, advocate for LGs to increase GRBP, and to strengthen women's involvement in the decision making regarding WASH and WRM issues. The improved capacity of female workers in the water and sanitation sectors will be monitored through Government Index, PDAM Index, and Sanitation Index, while the GRBP will be monitored through APBD tracking tool.

At the community level, USAID IUWASH Tangguh will execute a participatory approach that provides opportunities for women and marginalized community members to become agents of change and secure access to improved WASH and WRM services. Furthermore, USAID IUWASH Tangguh will encourage male participation in activities related to hygiene promotion.

#### 3.6.1. PARTNER COLLABORATION

Acceleration of gender integration and women involvement in WASH and WRM sectors requires collaboration with GOI, donors and other development programs. USAID IUWASH Tangguh will work closely with the Ministry of Women Empowerment and Child Protection to integrate GESI in terms of using a GESI lens into WASH and WRM sectors, and to gather input for the development of Gender Assessment and Action Plan. USAID IUWASH Tangguh will also work with BAPPENAS, MOH, MPWH and the Ministry of Environment and Forestry to assess the gender roles in WASH and WRM sectors. Specifically, with MOH, USAID IUWASH Tangguh will engage in existing GESI integration programs, such as STBM GESI.

In PYI, USAID IUWASH Tangguh will assess potential collaboration with other donors and development programs, including FORKALIM (association of wastewater operators). The exhibit below presents key partners and their roles.

Exhibit 20. Gender Programming Key Partners									
Partner	The activity								
BAPPENAS	Coordination to get input for GESI assessment								
MWECP	Engage with MWECP to get input and endorsement for Gender Assessment and Action Plan								
МОН	update implementation of STBM GESI								
Ministry of Environment and Forestry	Coordination to get input for GESI assessment								
Ministry of Public Works and Housing	Update GESI integration into WASH program								
FORKALIM	GESI assessment to portrait gender roles on wastewater management operator								
Donors, NGOs and development programs	Engage with other development programs and assess potential collaboration to integrate GESI. Such programs may include those of Wahana Visi Indonesia, Yayasan Plan Indonesia, SNV, SIMAVI, YPCII, Water.Org, Unicef, DFAT, Yayasan KEHATI, USAID SEGAR, Samdhana Institute, Kapal Perempuan etc.								

#### 3.6.2. ACTIVITY INTEGRATION

GESI programming will be mainstreamed into all USAID IUWASH Tangguh objectives. For example, Objective I will support GESI programming by advocating for, implementing and monitoring GRBP usage through the APBD tracking tool. Objective 2 and Objective 3 will support GESI mainstreaming through the workforce development framework for service providers and by monitoring progress through the government index (Godex), Sanitation Index (Sandex) and PDAM index. Objective 4 will support Objectives I-3 by building sector capacities and creating/expanding mechanisms to promote social accountability and inclusivity and create an environment that is conducive to women involvement and leadership in the WASH and WRM sectors.

PYI will focus on development of a GESI assessment and action plan, initial partnership-building with stakeholders both at national and sub national levels, and hotspot selection.

#### 3.6.3. TASK BY TASK DETAILED DESCRIPTION

# Sub-task 4.3.1.1 Develop GESI strategy and action plan to ensure women involvement in decision making and men participation on hygiene promotion and practices

As initially referenced in Task 4.3 Accelerate gender integration and women's agency in WASH and WRM sectors, USAID IUWASH Tangguh will develop a strategy and action plan to promote improved women involvement in decision making and male participation in hygiene promotion and practices. USAID IUWASH Tangguh will engage the Ministry of Women Empowerment and Child Protection to take part in the development process for the GESI strategy and action plan, and will also collaborate with technical ministries to ensure that they are applying a GESI lens in order to target the most vulnerable and marginalized communities for efforts to improve WASH services.

During the PYI project implementation USAID IUWASH Tangguh will:

- Conduct a Gender assessment and analysis
- Lead consultations with the Ministry of Women Empowerment and Child Protection,
- Develop gender working groups at sectoral ministries
- Finalizing Gender assessment and action plan

# Sub-task 4.3.1.2 Gender analysis to build a portrait of gender roles in community decision making and institutional decision making

USAID IUWASH Tangguh will conduct a gender assessment and analyze gender roles in WASH and WRM, both at community and institution levels. The portrait of gender roles in WASH and WRM will help USAID IUWASH Tangguh to better understand the gender roles and develop the appropriate program (targeting) that will ensure women's involvement in decision making as well as the development of capacity building programs for WASH and WRM workers.

During the PYI, USAID IUWASH Tangguh will focus on data collection with regards gender roles at the institution and community level.

Exhibit 21. Gender Programming 4 PY1 Activities and Timelines											
			YEAR I TIMEFRAME								
SUB-TASK	INPUT	OUTPUTS	APR	MAY	JUN	JUL	AUG	SEP	YEAR 2 (CONT'D)		
Task 4.3.1 Develop GESI strategy and action plan to ensure women involvement in decision making and men participation on hygiene promotion and practices  Conduct Gender assessment and analysis		Gender assessment on the existing condition									
Consultation with Ministry of Women		Input from Ministry of									

Exhibit 21. Gender Programmi	ng 4 PY1 Activitie	es and Timelines										
			YEAR I TIMEFRAME									
SUB-TASK	INPUT	OUTPUTS	APR	MAY	NOL	JUL	AUG	SEP	YEAR 2 (CONT'D)			
Empowerment and Child Protection, Gender working group at sectoral ministries		Women Empowerment and Child Protection										
Finalizing gender     assessment and action     plan		Gender assessment and action plan										
Task 4.3.2 Gender analysis to portrait gender roles in community decision making and institutional decision making  • Gathering data and information through group discussion		Initial information of gender roles										

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# 4. PROGRAM MANAGEMENT

### 4.1. INTRODUCTION

Project management is an important component of USAID IUWASH Tangguh, a multi-year project with complex operations in five regions focused on both WASH and WRM. Smooth and effective operations will support the success of project implementation. This section covers the approaches and tasks to be undertaken in various aspects of USAID IUWASH Tangguh management during the first project year. In this section, we cover the areas of general project management, the personnel recruitment plan, site selection, sub-contracting plan, coordination with the USAID IUWASH Tangguh Executing Agency and Technical team at national level, coordination with the USAID/Indonesia team, project reporting, Monitoring, Evaluation and Learning (MEL), and environmental compliance.

## 4.2. GENERAL PROJECT MANAGEMENT

The ultimate success of USAID IUWASH Tangguh will depend on the effectiveness of the project's technical components with support from an operations system that facilitates compliant implementation. The system will be built upon the clear organizational and management structures. The project's approach to achieving its high-level results is based on the establishment of clear lines of authority among team members to enable technical oversight excellence, supportive project management, and the integration of key cross-cutting elements. Annex 3 presents the USAID IUWASH Tangguh organizational charts for the project's national and regional offices. Please note that USAID IUWASH Tangguh will provide more detailed organizational charts for all regional offices after all team members are onboard.

## 4.2.1. MANAGEMENT PLAN

As depicted in Annex 3, USAID IUWASH Tangguh key personnel and lead finance/administrative staff are already on board and stationed in the national office in Jakarta. Regional offices in North Sumatra (in Medan), West Java/DKI Jakarta/Banten (in Jakarta), Central Java (in Solo), East Java (in Surabaya), and South Sulawesi (in Makassar) will be managed by senior professionals and staffed with technical specialists across all USAID IUWASH Tangguh areas of activity.

This management plan will:

- Provide the USAID IUWASH Tangguh team the resources needed to match the project approaches with tailored technical assistance that responds to local needs;
- Outline clear lines of authority whereby the most senior advisors to provide overall direction in their respective technical areas within the project;
- Call for the senior management team and technical team to socialize the project to the project partners at national and regional levels;
- Support the development of Annual Workplan, especially for the senior technical leads to discuss and consult the five years program frameworks as well as input into central government policy and programming deliberations;
- Ensure that interventions are driven by local need and informed by local resources and capacity by calling for a full-time presence at the local level, facilitating understanding and responsiveness to local needs and opportunities.

The following sections provide additional detail on the organizational structure at national and regional levels.

### **NATIONAL OFFICE**

The national office is based in Jakarta. This office serves as the USAID IUWASH Tangguh headquarters. This office manages relationships and reporting to USAID and central government counterparts. The Jakarta Office also serves as the base for the Project's designated five key personnel, other objective leads, senior technical National Coordinators and specialists, and lead finance and administrative personnel.

The national team will coordinate with the regional team to manage the program activities ensuring that strategies developed at the national level are customized to the local context. USAID IUWASH Tangguh Management Team applies decentralized project activities and frequent and open communication. It will allow the project team members to share the lessons learned and technical knowledge among different objective team members. If needed, the national team members will travel frequently to the regions to provide targeted technical support, ensure that USAID IUWASH Tangguh activities are proceeding as planned, gather lessons learned and best practices, and work with regional managers to ensure that USAID IUWASH Tangguh is maximizing every opportunity to leverage technical assistance and support from within the project, other donor projects, the private sector, and other partners.

More fully, the role of the National office is to:

- Provide overall strategic direction and technical leadership to USAID IUWASH Tangguh;
- Assure the five principles of USAID IUWASH Tangguh (PSE, GESI, alignment and coordination, CLA and sustainability and capacity building) are embedded in relevant project activities to support the achievement of project targets;
- Oversee national engagement with Government of Indonesia partners especially Bappenas and its Technical Team (the Ministry of Public Works, the Ministry of Health, the Ministry of Home Affair) and other relevant ministries;
- Communicate, coordinate and serve as the project liaison with USAID, the GOI, other donors and other partners;
- Coordinate with other WASH projects and initiatives and participate in donor coordination meetings;
- Provide technical support, guidance and resources to the regional offices;
- Ensure that all offices apply common standards and approaches in project activities;
- Disseminate success stories, best practices, lessons learned, and innovations;
- Monitor and evaluate project performance;
- Lead the recruitment process for the national and regional offices; and
- Oversee USAID IUWASH Tangguh administration and finances, ensuring that the project adheres to USAID and DAI policies and procedures.

Throughout PYI, the National Office will have an especially important role in overseeing the start-up of the project activities, establishing regional offices, hiring project technical and operational staff, conducting key IT and office procurement, and leading the site selection process.

### **REGIONAL OFFICES**

USAID IUWASH Tangguh regional offices will be located primarily in capital cities that have reliable access to lakarta / the national office and are conveniently positioned near clusters of assisted cities and districts. Three of the five regional offices will have satellite offices (small regional offices), as outlined in the exhibit below.

Exhib	Exhibit 22. USAID IUWASH Tangguh Satellite Offices											
No	Regional Office	Location	Satellite Office									
I	North Sumatra	Medan city	None									
2	West Java/DKI Jakarta/Banten (WJDB)	Jakarta city	West Kalimantan province									
3	Central Java	Surakarta city	None									
4	East Java	Surabaya city	East Nusa Tenggara province									
5	South Sulawesi	Makassar city	Papua province									

Regional offices will serve as primary implementation centers for all assistance provided to the local level. Regional offices are led by Regional Managers who are senior Indonesian experts. The Regional Managers will guide the technical teams to implement the project based on frameworks developed by the National team. The regional teams are responsible for day-to-day activity implementation and directly interfacing with subnational government entities to integrate WASH and WRM concerns into relevant planning, budgetary, or operational processes. In the beginning of the project period, the Regional Team will play an important role in supporting development of the Annual Workplan/Rencana Kerja Tahunan (RKT) that is required by the GOI.

In terms of management, the Regional Managers have decision-making authority and oversight responsibility for project activities within their regions. They will be supported through daily communications with and frequent visits from staff in the Jakarta office. Regional Managers, as well as regional technical staff, will also visit Jakarta for regular project coordination and administration meetings and will travel between regions and lakarta for project technical reviews to share lessons learned, review accomplishments, and discuss strategies for addressing specific challenges.

As part of the Project's overall interventions at the subnational level, Jakarta-based technical specialists and National Coordinators and Regional Managers will regularly organize inter-regional exchanges to review programmatic progress, challenges, and best practices—and quickly integrate lessons learned from one region into Project plans and activities in others. This will capitalize on the scale of USAID IUWASH Tangguh and facilitate open communication, team building, adaptive management, and team cohesion. The management will use the online platform such as Microsoft Teams, Zoom, Google Meet and other as much as possible to facilitate the sharing session among the project team members.

#### 4.2.2. INTERNAL COORDINATION WITHIN THE USAID IUWASH TANGGUH TEAM

Internal coordination within the USAID IUWASH Tangguh team is a key project management responsibility. During PYI, USAID IUWASH Tangguh will facilitate internal coordination at regional and national levels by:

- Leading initial capacity building activities at national and regional levels that are focused on integrating activities under the four objectives through the IRIS approach, followed by interregional exchanges among staff to improve better understanding of the programs.
- Maximizing the above exchanges through the use of recurring web-based video check-ins and joint project planning among objective teams across the regions.
- This strategy will also allow the management to facilitate open communication, adaptive management, and team cohesion across its many work locations.

### 4.2.3. RELATIONSHIP BETWEEN THE PROJECT AND DAI HOME OFFICE

DAI's home office (HO) team plays a significant role in PYI project activity especially in the beginning of project period. The HO team supports USAID IUWASH Tangguh in implementing quick mobilization activities—especially in setting-up administration systems, responding to USAID requests for contractual information and conducting initial recruitment.

After the quick mobilization period, the HO Team will support the USAID IUWASH Tangguh through ongoing activities such as providing technical oversight, responding to USAID requests for contractual information, issuing accurate invoices and other financial statements, recruitment of LTTA and STTA under Sub-contractors and mobilizing short-term expat personnel. This support is provided through the services of a Project Team Director, Senior Project Manager (Asia Project Manager) and an Associate. The Project Team Director provides overall technical support to USAID IUWASH Tangguh while the Senior Project Manager serves as the COP's day-to-day point of contact in the DAI home office. The home office team organizes quarterly project reviews with the COP to discuss and resolve management and technical issues or respond to requests for information. They also coordinate home office support (including Finance, Contracts, Procurement, Information and Management Technology, Human Resources, Communication, etc.) to ensure that the COP has the support and resources needed to manage USAID IUWASH Tangguh and meet or exceed USAID expectations. Also, 1-2 times per year, the home office will hold a client satisfaction meeting with the TOCOR to help ensure that the project meets or exceeds USAID's expectations. In addition, the DAI Home Office WASH technical team, which consists of experienced WASH sector specialists, are available to provide on-demand technical support to activities throughout project implementation.

### 4.2.4. MATRIX MANAGEMENT

USAID IUWASH Tangguh's broad technical remit—working in complex WASH and WRM sectors, as well as a range of cross-cutting areas, and its geographically dispersed work sites in ten provinces that includes 39 assisted cities and districts—calls for a "matrix management" structure and very effective communication and coordination. USAID IUWASH Tangguh's matrixed structure will aim to maximize the utility of resources and apply consistent approaches and techniques across sites. Coordination at the regional level will be led by the Regional Managers while technical coordination will be led by the objective leads at the national level. For example: an urban sanitation specialist in a regional office will report first to the Regional Manager with secondary reporting to the Objective

Lead 2-Sanitation and the National Coordinator of Urban Sanitation in Jakarta. Similarly, a regional accountant will report directly to the Regional Manager with secondary oversight provided by the Finance Officer in Jakarta. Detailed USAID IUWASH Tangguh matrix management is provided in Annex 3. The matrix is not completed yet. Once all staff are onboard we will adjust the matrix accordingly.

## 4.2.5. MANAGEMENT AND COMPLIANCE SYSTEM

During USAID IUWASH Tangguh start-up, DAI HO staff—working both remotely and as part of our in-country start-up teams—will assist in the setup and tailoring of the following systems:

- The Technical and Administrative Management Information System (TAMIS), a customizable, secure database that serves as a workflow management and reporting tool that integrates activity management, project administration, impact and performance monitoring, and streamlines subcontract and grant management along with other management tasks.
- IT infrastructure and systems. HO IT specialists will work with the USAID IUWASH Tangguh IT Manager to establish an IT infrastructure in the Jakarta and field offices starting in the day one of the project, with targeted completion by the end of Year I (Sep 2022). This IT team will oversee compliance with DAI IT policies and procedures, review processes of network monitoring and server maintenance, and establish product instruction manuals as needed.
- DAI's accounting system, called vFER, is an excel-based application for managing USAID IUWASH Tangguh vendors, day-to-day expenses, and monthly payroll. This system also requires in-country customization and training, which is anticipated to take place in September 2022 following the onboarding of all finance personnel and completion of regional office and IT system set-up.
- The Field Operations Manual (FOM), the central location for all of USAID IUWASH Tangguh policies, procedures, work instructions, and forms. The FOM template builds on DAI's project management and compliance experience and allows customization so that the project team may regularly update policies and procedures to reflect any changes in US Government requirements and regulations. This template, currently being customized by our HO Project Associate together with the DCOP-Operations, will be completed by September 2022.

## 4.2.6. PROJECT BUDGETING

USAID IUWASH Tangguh operates effective project budgeting to support project implementation. The USAID IUWASH Tangguh Financial Team will prepare monthly financial reports which will be used to produce monthly budget pipelines and monthly invoices for USAID. To prepare the monthly financial report, the team will coordinate with the Regional Accountants to upload daily expenses in vFER. The Finance Team will coordinate with the technical team to project and track spending for project activities. The project financial report will also be used to develop the BAST report.

### PROJECT PROCUREMENT 4.2.7.

USAID IUWASH Tangguh will conduct extensive procurement during start-up and PYI. During the start-up period, the USAID Tangguh team sought and secured USAID MCIO and Contracting

Officer approval for procurement of IT equipment needed to establish project operations and systems, and from the COR for general procurement needs, such as office furniture and supplies. All equipment and that is equal or greater than \$500 in value was included in the procurement plan. All procurement activities, backup documentation and approval records will be recorded in the USAID IUWASH Tangguh TAMIS.

### PLANNED GENERAL PROJECT MANAGEMENT ACTIVITIES 4.2.8.

There are several critical general management tasks that will be undertaken in Year 1 in order to ensure a rapid and efficient start-up of the project, in line with the management strategies outlined above. These tasks have already been elucidated in the Mobilization and Quick Start Plan submitted in April 2022 and summarized in the following exhibit.

Exhibit 23. Project Managem	Exhibit 23. Project Management Main Programs for PYI.  YEAR I TIMEFRAME								
ACTIVITY	INPUT	OUTPUTS	APR	МАУ	NOI	JUL	AUG	SEP	YEAR 2 (CONT' D)
Establishing national office and WJDB regional office in Jakarta	Meeting, LTTA, STTA	National and WJDB office lease signed and Jakarta-based staff are working in the offices the existing condition							
Establishing regional offices	Meeting, LTTA	Regional office leases in 4 cities (Medan, Solo, Surabaya and Makassar) signed regional-based staff are working in the offices							
Registration of Project Tax ID Number (PTIN)	Meeting, LTTA	Project Tax ID Number (PTIN) registered and ready to be used							
Recruit Jakarta and regional-based staff	Meeting, LTTA, STTA	Jakarta and regional-based staff are hired and on-boarded							
Conduct Ethics, Anti- Discrimination and similar staff training	Meeting, LTTA	Establish improved understanding of appropriate business behavior working under USAID							
Visits to regions by national operations staff for training/ monitoring	Meeting, LTTA	New employees on-boarded, and improved levels							

Exhibit 23. Project Managem	Exhibit 23. Project Management Main Programs for PY1.									
			YEAR I TIMEFRAME							
ACTIVITY	INPUT	OUTPUTS	APR	MAY	NOI	JUL	AUG	SEP	YEAR 2 (CONT'D)	
		of compliance with policies and procedures								
Regular Weekly Meeting of Senior Management Teams	Meeting, LTTA	Day-to-day issues raised affected project management discussed and solved								
Regional Managers' Coordination Meeting	Meeting, LTTA	Critical Issue raised and important topics discussed with regional team								
Customize USAID IUWASH Tangguh Technical and Administrative Management Information System (TAMIS)	Meeting, LTTA, STTA	Project TAMIS is tailored to meet USAID IUWASH Tangguh technical and operational needs								
Customize USAID IUWASH Tangguh Field Operations Manual	Meeting, LTTA	Operational manual for USAID IUWASH Tangguh project updated and function								
Set up IT infrastructure and systems	Meeting, LTTA, STTA	IT equipment and software procured and installed in Jakarta and regional offices								
Set up Field Accounting System (FAS)	Meeting, LTTA, STTA	Project financial system is operational and finance staff are trained								
Submit monthly USAID IUWASH Tangguh budget pipeline	Desk work, LTTA	Monthly USAID IUWASH Tangguh budget pipeline submitted								
Submit monthly USAID IUWASH Tangguh invoice	Desk work, LTTA	Monthly USAID IUWASH Tangguh invoice submitted								

Exhibit 23. Project Managem	Exhibit 23. Project Management Main Programs for PY1.										
			YEAR I TIMEFRAME								
ACTIVITY	INPUT	OUTPUTS	APR	MAY	NOL	JUL	AUG	SEP	YEAR 2 (CONT'D)		
Submit Procurement Plan	Desk work, LTTA, STTA	Procurement Plan submitted to USAID									
Procure equipment to support project start-up and operation	Desk work, LTTA	Equipment needed to support project start-up and operation completed									

### 4.3. PERSONNEL RECRUITMENT PLAN

As part of the start-up activities, the DAI HO supported initial priority recruitment and onboarding of Key Personnel, the DCOP-Operation, and key administrative staff to support the implementation of quick mobilization plan. Remaining positions were grouped, recruited and onboarded in stages. The second batch of recruitment was focused on the objective leads who are not the key personnel, key national coordinators and Regional Managers—those staff who were essential for initial workplanning and meeting with government partners. The third batch is focused on the recruitment of remaining national staff (technical and administrative team) and Regional Office Managers who will support project leadership in customizing and carrying out technical and compliance activities. The final batch will be focused on the staff of regional offices.

Along with these recruitment process, USAID IUWASH Tangguh also recruited STTA to provide discreet support for key activities. Prior to mobilizing any expat STTA, USAID IUWASH Tangguh will submit requests for International Travel Approval to USAID. Below in the following exhibit is the USAID IUWASH Tangguh detailed personnel recruitment plan.

Exhibit 24. PY I Personnel Recruitment Plan.										
					YEA	R I TII	MEFRA	ME		
ACTIVITY	INPUT	OUTPUTS	APR	MAY	NOL	JUL	AUG	SEP	YEAR 2 (CONT'D)	
First Batch of LTTA Recruitment	Meeting, LTTA	Key personnel, DCOP- Operation, and key administrative staff on boarded								
Second Batch of LTTA Recruitment	Meeting, LTTA	Objective leads who are not the key personnel, key national coordinators and Regional Managers on boarded								

Exhibit 24. PY I Personne	Exhibit 24. PY1 Personnel Recruitment Plan.									
					YEAI	RITI	MEFRA	ME		
ACTIVITY	INPUT	OUTPUTS	APR	MAY	JUN	JUL	AUG	SEP	YEAR 2 (CONT'D)	
Third Batch of LTTA Recruitment	Meeting, LTTA	Remaining national staff (technical and administrative team) and Regional Office Managers on boarded								
Fourth Batch of LTTA Recruitment	Meeting, LTTA	Most of staff of regional offices on boarded								
DAI HO STTA Team to support start-up of project implementation	Meeting, STTA, LTTA	Eight persons in various roles submitted to USAID and obtained approval to work on various role of start-up project activities								
National and Expat STTA to support the PYI program implementation	Meeting, STTA, LTTA	Two expat STTAs submitted and obtain approval from USAID (including the International Travel Plan)  Around 10 National STTAs submitted and obtain approval from USAID								

### 4.4. SITE SELECTION

Within the first 45 days of contract award, USAID IUWASH Tangguh submitted the initial Site Selection Report to USAID. The site selection process was informed by analysis of secondary data and several coordination meetings with Bappenas as the Executing Agency and the Technical Team, a co-design workshop with the Impact Evaluation Team and representatives from USAID/Indonesia and the USAID Urban Resilience by Building partnerships and Applying New evidence in WASH (URBAN WASH) program. The proposed provinces, cities and districts were approved by USAID and GOI in June 2022. Below, we summarize key stages of the site selection process.

Exhibit 24. PYI Activity	for Site Selection.								
					YEAI	RITI	1EFR/	ME	
ACTIVITY	INPUT	OUTPUTS	APR	MAY	JUN	JUL	AUG	SEP	YEAR 2 (CONT' D
Coordination meetings with Executing Agency (Bappenas) and its Technical Team	Meeting, LTTA	The Executing Agency (Bappenas) and its Technical Team understood the USAID IUWASH Tangguh and site selection method approved							
Data analysis to prepare long-list and short list of the potential assisted cities and district	Desk review, LTTA, STTA	Short list of the potential assisted cities and district proposed and agreed by Bappenas and Technical Team							
Development of commitment letter by LG of potential assisted cities and districts	Meeting, LTTA	Commitment letter and additional WASH and WRM relevant information submitted by potential LG partners							
Review and analysis of the data and commitment letter sent by potential LG partners	Meeting, LTTA	USAID IUWASH Tangguh assisted cities and districts determined by Bappenas							
Coordination meeting with MOHA on introduction of USAID IUWASH Tangguh and development of Annual Workplan (Rencana Kerja Tahunan/RKT) at city/district level	Meeting, LTTA	The Executing Agency (Bappenas) and its Technical Team understood the USAID IUWASH Tangguh and follow up plans agreed on the development of Annual Workplan (Rencana Kerja Tahunan/RKT) at city/district level							

### 4.5. SUB-CONTRACTOR PLAN

DAI Global LLC as the primary contractor of USAID IUWASH Tangguh joins with two subcontractors, Planet Partnerships and the Solstice Institute LLC (mWater), to implement the USAID IUWASH Tangguh project. Planet Partnership provide three LTTA and STTA as needed to develop the project's private sector engagement (PSE) strategy and support implementation of WASH and WRM finance activities, while the Solstice Institute will provide STTA to support survey design and develop tools for data collection, analysis and visualization to improve the management systems and capacity of utilities and other WASH service providers, among other activities. We outline below the YI workplan for subcontractor engagement.

Exhibit 25. PYI Activity for	Exhibit 25. PYI Activity for Sub-Contractor Plan.											
					YEA	R I TIN	1EFRA	ME				
ACTIVITY	INPUT	OUTPUTS	Apr	Мау	unſ	lul	Aug	Sep	Year 2 (cont'd)			
Develop sub-contract for both Sub-contractors		Sub-contract for both sub-contractors signed										
Develop SOW for LTTA positions under sub-contractor and followed by recruitment and onboarding of the LTTAs		Three LTTA positions under sub-contractor hired										
Hiring STTA positions under sub-contractors as needed (expat and National)		Five to ten persons are recruited by subcontractor to support the implementation of project activities										

# 4.6. COORDINATION WITH THE USAID IUWASH TANGGUH EXECUTING AGENCY AND TECHNICAL TEAM AT NATIONAL LEVEL

Coordination with the key partners at the national level is critical for establishment of smooth project mobilization during start-up and project sustainability into the future. Key national-level partners include Bappenas as the Executing Agency, and a Technical Team that consists of several directorates under the Ministry of Public Works and Housing, the Ministry of Health and the Ministry of Home Affairs. Under the Ministry of Public Works and Housing, USAID IUWASH Tangguh works with the Directorate of Drinking Water and the Directorate of Sanitation. Under the Ministry of Health, USAID IUWASH PLUS works closely with the Directorate of Environmental Health, and under the Ministry of Home Affairs, USAID IUWASH Tangguh works with the Directorate of Synchronization of Local Government Affairs II. In the exhibit below, we present a timeline for coordination activities at the national Level.

Exhibit 26. PYI Coordinati	Exhibit 26. PYI Coordination Activity with the Executing Agency and Technical Team at National Level.										
					YEA	R I TII	MEFR.	ME			
ACTIVITY	INPUT	OUTPUTS	APR	MAY	NOI	JUL	AUG	SEP	YEAR 2 (CONT'D)		
Kick off meeting to introduce USAID IUWASH Tangguh Project		Kick off meeting conducted									
Consultation on Life- of-Project and PY I/PY2 activities		Framework of Five Year Program and PY1/PY2 activities discussed with national partners									
Technical Team Meeting (to be held quarterly after the start-up period)		Progress of USAID IUWASH Tangguh project shared and planning for the next quarter completed									
Coordination on Annual Workplan (Rencana Kerja Tahunan/RKT) developed by LG partners		Inputs and comments for the Annual Workplan (Rencana Kerja Tahunan/RKT) developed by LG partners collected to improve the document									

## 4.7. COORDINATION WITH THE USAID INDONESIA TEAM

USAID IUWASH Tangguh will regularly coordinate with the USAID Indonesia team to achieve the following:

- Ensure the project consistently delivers high quality technical assistance that meets USAID expectations, while ensuring compliance with rules and regulations.
- Strengthen coordination and collaboration with other USAID projects—thus efficiently using U.S. taxpayer resources to collectively achieve development impact.
- Promote best practices and lessons learned within the USAID network globally.

Across PYI, the USAID IUWASH Tangguh COP, DCOP-Operations and DCOP-Technical will hold at a minimum:

- Bi-weekly meetings with USAID/Indonesia to discuss day-to-day issues that impact project implementation and plan high level events with USAID/Indonesia participation;
- Regular coordination meetings with relevant USAID projects, such as ERAT, MADANI, etc. to discuss and plan opportunities to collaborate and carry out joint initiatives.

USAID IUWASH Tangguh will also ensure that USAID/Indonesia is well informed of project activities and success stories by producing a weekly highlight story for distribution within the USAID network.

Exhibit 27. PYI Coordin	Exhibit 27. PYI Coordination Activity with the USAID/Indonesia Team										
					YEA	R I TIN	1EFRA	ME			
ACTIVITY	INPUT	OUTPUTS	APR	MAY	NOI	JUL	AUG	SEP	YEAR 2 (CONT'D)		
Biweekly Meeting with USAID/Indonesia Team	Meeting, LTTA	Day-to-day issues raised affected project implementation discussed and solved     High level events involved USAID/Indonesia participation discussed									
Coordination Meeting with relevant other USAID projects	Meeting, Workshop, LTTA	Potential collaboration with other USAID projects identified and implemented									
Writing Weekly Highlight Story	Story writing, LTTA	Interested stories written as the weekly highlight and shared widely within USAID internal network									

## 4.8. PROJECT COMMUNICATION

Capturing project activities and sharing successes in an impactful way requires relevance and access. Knowledge products must be both pertinent to the information needs and challenges of stakeholders and easily searchable and accessible. Therefore, while ensuring the program activities and products are in compliance with the USAID branding and marking guidelines, the project communication team will work closely with the objective teams at the national and regional levels to develop and produce Information, Education, and Communication (IEC) materials and channels that update key stakeholders and relevant target audiences about project activities and accomplishments, including supporting the implementation of project events. For dissemination, the project will optimize the use of online-based communication channels, such as website and social media platforms, that are conducive to viewing via mobile phones.

Communication activities in PY1 will include the following:

Develop the branding strategy and marking plan to provide guidelines to ensure all project deliverables and program activities are marked properly with the USAID identity and to describe how the project will promote program activities to stakeholders and beneficiaries and to communicate the funding for the program is from the American people.

- Exceptions/waivers to marking requirements will be requested for TOCO approval on a case-by-case basis.
- Develop and maintain digital communication channels to update and disseminate program and outreach materials and activities, as well as sharing successes and lessons learned. The project will build from the website setting from the previous USAID IUWASH PLUS website and redevelop the user interface design for USAID IUWASH Tangguh. An enewsletter platform will also be included on the website. For social media platforms, USAID IUWASH Tangguh will also update the predecessor social media handles on Facebook Fanpage, Twitter, Instagram, and YouTube. For PYI, the communication team will start redeveloping the website and support the Objective 4 (link to task 4.2.2) team's efforts to customize social media platforms and make initial content updates.
- Develop a mini studio for digital media production to produce a variety of simple and interesting digital content for social media platforms. The communication team will work in collaboration with the MEL and Objective 4 teams to produce varied content for learning and outreach activities, such as video presentations, simple educational videos, and podcast programs. Digital content is also expected to drive viewership, particularly on the USAID IUWASH Tangguh YouTube channel.
- Develop IEC products and stories in coordination with the objective teams to support program and outreach activities. The products will be disseminated through digital platforms and various offline events. The initial programmatic factsheets and banners, such as factsheets on the project, RPAM, ZAMP, GESI, CTPS, and sanitation resilience; city/district profiles; and banners on the project, GESI, and CTPS, will be developed in PYI.
- Support project reports and the deliverables development process to be ready for submission to USAID as scheduled. The project reports include Quarterly Progress Reports (QPRs), Annual Progress Reports (APRs), Annual Workplans, technical reports, and weekly highlights. In PYI, the communication team also supported development of the strategic communication plan for outreach and media engagement activities under Objective 4 (link to task 4.2.2).
- Support regional/national events and field visits to share program analyses, lessons learned, best practices, and achievements. The communication team will support the preparation of relevant event materials and, when necessary, support the event/visit preparation. During PYI, we anticipate the needs for co-branding and branding exemption as follows:
  - Co-branding: Events/activities and publications held and produced jointly between USAID IUWASH Tangguh and the national/regional governments, institutions, private sector, donors, and other relevant WASH and WRM partners would require cobranding for its event and informational materials and publications.
  - > Branding exemption: On certain occasions, USAID IUWASH Tangguh receives specific request to support GOI events and/or publications production. However, because the GOI must have the full ownership of events/publications, USAID branding could not be applied. USAID IUWASH Tangguh would submit request for branding exemption to COR on a case-by-case basis depending on the GOI request for the specific support. For PYI, an anticipated branding exemption that can be identified is the Bappenas

request to support the production of videos to support its National Sanitation and Water Supply Conference (KSAN) event.

The exhibit below summarizes the principal reporting tasks and deliverables for PYI.

Exhibit 28. PYI Project (	Exhibit 28. PYI Project Communication Activities								
					YEA	RITI	1EFRA	ME	
ACTIVITY	INPUT	OUTPUTS	APR	MAY	JUN	JUL	AUG	SEP	YEAR 2 (CONT'D)
Develop Branding Strategy & Marking Plan	Writing document, STTA, LTTA	<ul> <li>USAID approved         Branding Strategy         and Marking Plan</li> <li>Templates for         administrative &amp;         programmatic         products</li> </ul>							
Develop & maintain program website	Meeting, PO, LTTA	Program website live and accessible for public							
Develop e-newsletter platform and subscribers database	Writing story. LTTA	<ul> <li>e-newsletter platform ready to use</li> <li>Number of potential subscribers</li> </ul>							
Adjust and update social media handles from IUWASH PLUS to USAID IUWASH Tangguh (link to objective task 4.2.2.)	Desk study, LTTA	Adjusted and updated description and profile photos on social media handles @airsanitasi for Facebook Fanpage, Twitter, Instagram, and YouTube     Initial content update							
Develop mini studio for digital media production	Design work, PO, LTTA	Mini studio ready for digital media production, e.g., video presentation, simple learning video, and podcast (the production will start in PY2)							
Write weekly highlights	Story writing. LTTA	Weekly report of highlighted activities							
Produce program & technical IEC materials to support outreach and advocacy activities	Desk study, design works, LTTA	Produced and disseminated IEC products, e.g., factsheets, banners, technical reports, publication, etc.							

Exhibit 28. PYI Project (	Exhibit 28. PYI Project Communication Activities										
			YEAR I TIMEFRAME								
ACTIVITY	INPUT	OUTPUTS	APR	MAY	NOL	JUL	AUG	SEP	YEAR 2 (CONT'D)		
Support the development & finalization of project reports & deliverables	Layout work, LTTA	Final project reports and deliverables for USAID submission									
Support regional/national events and field visits	Advocacy Event, LTTA	Relevant event materials (backdrop, IEC products, etc.)									

### 4.9. ENVIRONMENTAL COMPLIANCE

USAID IUWASH Tangguh interventions are primarily focused on capacity building, promotion, training, and technical assistance. There will be no construction activities directly paid for by the project. However, USAID IUWASH Tangguh will facilitate investment in construction activities from the LG and private sector partners. Given that construction activities fundamentally involve changes to both the natural and built environment, USAID IUWASH Tangguh abides by the US Government's environmental compliance policies and procedures as set forth Title 22, Code of Federal Regulations, Part 216 (22 CFR 216). As regulated under the Initial Environmental Examination (IEE) for USAID IUWASH Tangguh developed in February 2022, all project activities must be screened for environmental risk. The IEE of USAID IUWASH Tangguh provides first review of reasonably foreseeable environmental effects and climate risk ratings and recommends a Threshold Decision for USAID IUWASH Tangguh. The IEE assesses potential environmental impacts and makes recommended determinations by activity type organized around the project's objectives. The IEE concluded that certain activities anticipated under USAID IUWASH Tangguh merited a "categorical exclusion" per Title 22, Code of Federal Regulations, Part 216 (22CFR216) while construction activities by partners will fall into the category of "negative determination with conditions".

Pursuant to 22 CFR 216.2(c)(2), activities recommended for **Categorical Exclusion** include:

- Education, technical assistance, or training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities, etc.)
- Analyses, studies, academic, or research workshops and meetings
- Document and information transfers
- Studies, projects, or programs intended to develop the capability of recipient countries to engage in developing planning, except to the extent designed to result in activities directly affecting the environment

The focus of the PYI environmental compliance activities will be development of the Environmental Mitigation and Monitoring Plan (EMMP), which is due to USAID within 90 days after award of the project (see in separate document in Attachment I of this AWP document). In the last quarter of PYI, the USAID IUWASH Tangguh team will meet with national and regional teams to identify any PY2 project activities that would be designated as negative determination with conditions.

# **ANNEXES**

## ANNEX I. DETAILED LIFE OF ACTIVITY MATRIX

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
Object 1	I.I	I.I.I - Develop and facilitate policies and regulations for improved WASH/WRM processes at national and local government levels	I. Conduct the analysis of the existing policies/regulation and improve if necessary	e and financing	National, provincial and all local government policies and regulations	IT I-4 IT I-5 IT I-6	Finance Innovation and Mobilization Lead	governance coordinator and governance specialist, WASH/WRM specialists	2.2.1	×	×				
I	1.1	I.I.I - Develop and facilitate policies and regulations for improved WASH/WRM processes at national and local government levels	2. Identify regulations needed	IT I-I	National, provincial and all local government policies and regulations	IT I-4 IT I-5 IT I-6	Finance Innovation and Mobilization Lead	governance coordinator and governance specialist, WASH/WRM specialists	2.2.1	Х	×				
I	1.1	I.I.I - Develop and facilitate policies and regulations for improved WASH/WRM processes at national and local government levels	3. Develop the regulations: Potential regulations being developed including: 3.a. Water Use Permitting and Monitoring tools 3.b. Low-cost monitoring and mapping tool for effluent monitoring against the national standards 3.c. LG-owned companies (BUMD) for integrated services of water and sanitation 3.d Promotion and enforcement of national onsite sanitation design and construction standards.	IT I-I	National, provincial and all local government policies and regulations	IT I-4 IT I-5 IT I-6	Finance Innovation and Mobilization Lead	governance coordinator and governance specialist, WASH/WRM specialists	2.2.1		X	X	Х	X	

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
I	1.1	I.1.2 Prioritize pathways for passage and implementation of draft policy and regulations	I. Discussion with LG and other local stakeholders for the draft. Example of LG-owned company (BUMD) for integrated services of water and sanitation, Stakeholders to be involved are: I.a. PDAM I.b. Local government office of Dinas Perumahan dan Pemukiman or UPTD I.c. Bappeda I.d. Local parliament (DPRD) I.e. Ministri of Public Works and Housing I.f. PERPAMSI	IT I-I	all local governments	IT 1-4 IT 1-5 IT 1-6	Finance Innovation and Mobilization Lead	governance coordinator and governance specialist, WASH/WRM specialists	2.2.1		X	X	X	X	
I	1.1	I.I.2 Prioritize pathways for passage and implementation of draft policy and regulations	Approval process at Mayor/district head	IT I-I	all local governments	IT 1-4 IT 1-5 IT 1-6	Finance Innovation and Mobilization Lead	governance coordinator and governance specialist, WASH/WRM specialists	2.2.1		Х	Х	Х	Х	
I	1.1	I.I.3 Stimulate participation of diverse stakeholders in broader policy reform and enforcement initiatives agenda.	I. Dissemination of the new policy (integrated WASH), to the targeted persons: I.a. Customer of water and/or sanitation I.b. PDAM and Dinas, etc	IT I-I	all local governments	IT I-4 IT I-5 IT I-6	Finance Innovation and Mobilization Lead	governance coordinator and governance specialist, WASH/WRM specialists	2.2.1		×	X	X	X	
ı	1.2	I.2.I Improve data flows to identify financial flows and gaps at the WASH/WRM sectoral level.	I. Collect data of WASH/WRM development plan from RPJMD (sanitation/WRM) and PDAM (water)	IT I-2	all local government budget (APBD), PDAM and WRM	IT I-4 IT I-5 IT I-6	Finance Innovation and Mobilization Lead	governance coordinator and governance specialist, WASH/WRM specialists	2.2.1	X	Х	X			
I	1.2	1.2.1 Improve data flows to identify financial flows and	2. Collect data of historical local budget (APBD) year 2019	IT 1-2	all local government budget	IT I-4 IT I-5 IT I-6	Finance Innovation and	governance coordinator and governance	2.2.1	X	Х	X			

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
		gaps at the WASH/WRM sectoral level.	to 2021 and identify the WASH and WRM allocation		(APBD), PDAM and WRM		Mobilization Lead	specialist, WASH/WRM specialists							
1	1.2	1.2.1 Improve data flows to identify financial flows and gaps at the WASH/WRM sectoral level.	3. Develop the allocation analysis using the APBD tracking tool	IT 1-2	all local government budget (APBD), PDAM and WRM	IT 1-4 IT 1-5 IT 1-6	Finance Innovation and Mobilization Lead	innovative finance coordinator and investment specialist, governance coordinator, governance specialist	2.2.1; 3.1.3		×	×	×	×	
1	1.2	I.2.2 Support financial planning and analysis at LG, PDAM, and UPTD service provider levels.	Discuss with local partner of the needed project to be developed, if agreed then	IT 1-2	all local government budget (APBD), PDAM and WRM	IT 1-4 IT 1-5 IT 1-6	Finance Innovation and Mobilization Lead	innovative finance coordinator and investment specialist, governance coordinator, governance specialist	2.3.1; 3.1.3		×	×	×	×	
I	1.2	I.2.2 Support financial planning and analysis at LG, PDAM, and UPTD service provider levels.	2. Develop the feasibility study	IT I-2	potential projects (TBD) to proceed with a multiple financing sources	IT I-4 IT I-5 IT I-6	Finance Innovation and Mobilization Lead	innovative finance coordinator and investment specialist, governance coordinator, governance specialist	2.3.1		×	×	×	×	
I	1.2	I.2.2 Support financial planning and analysis at LG, PDAM, and UPTD service provider levels.	3. Discussion of the FS draft with stakeholders (local and central gov't)	IT I-2	potential projects (TBD) to proceed with a multiple financing sources	IT I-4 IT I-5 IT I-6	Finance Innovation and Mobilization Lead	innovative finance coordinator and investment specialist, governance coordinator, governance specialist	2.3.1; 3.1.3		х	×	×	×	

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
1	1.2	I.2.2 Support financial planning and analysis at LG, PDAM, and UPTD service provider levels.	4. Discuss the analysis results with local government;	IT 1-2	potential projects (TBD) to proceed with a multiple financing sources	IT 1-4 IT 1-5 IT 1-6	Finance Innovation and Mobilization Lead	innovative finance coordinator and investment specialist, governance coordinator, governance specialist	2.3.1; 3.1.3		×	×	×	X	
I	1.2	I.2.2 Support financial planning and analysis at LG, PDAM, and UPTD service provider levels.	5. Facilitating LG to develop local budget with input of WASH and other related program (PDAM investment) recommended by IT	IT 1-2	potential projects (TBD) to proceed with a multiple financing sources	IT 1-4 IT 1-5 IT 1-6	Finance Innovation and Mobilization Lead	innovative finance coordinator and investment specialist, governance coordinator, governance specialist	2.3.1; 3.1.3		×	×	×	X	
I	1.2	I.2.3 Identify financing opportunities and create pipeline of WASH-/WRM- related investments	I. Discussion the proposal for funding approval (PDAM, LG fund or central/APBN)	IT I-2	all local government with projects and financing sources	IT I-4 IT I-5 IT I-6	Finance Innovation and Mobilization Lead	investment, PSE and innovative finance coordinators, investment, WASH/WRM, governance specialists	2.3.1; 3.1.3		Х	X	×	X	
I	1.2	I.2.3 Identify financing opportunities and create pipeline of WASH-/WRM- related investments	2. Compile the project info into the pipeline	IT 1-2	all local government with projects and financing sources	IT I-4 IT I-5 IT I-6	Finance Innovation and Mobilization Lead	investment, PSE and innovative finance coordinators, investment, WASH/WRM, governance specialists	2.3.1; 3.1.3		×	X	X	X	
I	1.2	I.2.3 Identify financing opportunities and create pipeline of	3. Identify the needed budget for WASH improvement	IT 1-2	all local government with projects and financing sources	IT I-4 IT I-5 IT I-6	Finance Innovation and Mobilization Lead	investment, PSE and innovative finance coordinators, investment,	2.3.1; 3.1.3		Х	×	Х	X	

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
		WASH-/WRM- related investments						WASH/WRM, governance specialists							
1	1.2	I.2.3 Identify financing opportunities and create pipeline of WASH-/WRM- related investments	4. Compile the project info into the pipeline, simultaneously promote the particular project for private investment (PPP for example) by facilitating PDAM / LG in the process	IT 1-2	all local government with projects and financing sources	IT 1-4 IT 1-5 IT 1-6	Finance Innovation and Mobilization Lead	investment, PSE and innovative finance coordinators, investment, WASH/WRM, governance specialists	2.3.1; 3.1.3		×	X	×	X	
1	1.3	I.3.1 Build capacity of WASH/WRM coordination institutions	Increase capacity local WASH institutions using the indices (Water, sanitation and WRM) as the measurement tool.	IT 2-I	all local government WASH/WRM institutions	IT 1-4 IT 1-5 IT 1-6	Finance Innovation and Mobilization Lead	Water, sanitation, WRM and innovative finance coordinators and investment, WASH/WRM specialists	2.1.1; 2.2.1; 3.1.5		×	×			
I	1.3	I.3.I Build capacity of WASH/WRM coordination institutions	Develop the indices of water and sanitation, and WRM	IT 2-I	all local government WASH/WRM institutions	IT I-4 IT I-5 IT I-6	Finance Innovation and Mobilization Lead	Water, sanitation, WRM and innovative finance coordinators and investment, WASH/WRM specialists	2.1.1; 2.2.1; 3.1.5		×	×			
I	1.3	I.3.I Build capacity of WASH/WRM coordination institutions	Record the baseline     Identify parameters or     aspects are categorized low	IT 2-I	all local government WASH/WRM institutions	IT I-4 IT I-5 IT I-6	Finance Innovation and Mobilization Lead	Water, sanitation, WRM and innovative finance coordinators and investment, WASH/WRM specialists	2.1.1; 2.2.1; 3.1.5		×	×			

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
I	1.3	I.3.1 Build capacity of WASH/WRM coordination institutions	Perform the improvement program and measures the endline	IT 2-I	all local government WASH/WRM institutions	IT 1-4 IT 1-5 IT 1-6	Finance Innovation and Mobilization Lead	Water, sanitation, WRM and innovative finance coordinators and investment, WASH/WRM specialists	2.1.1; 2.2.1; 3.1.5		×	×	×	×	
I	1.4	I.4.1 Expand mechanisms to promote social accountability and inclusivity	I. Data collection of existing mechanism of LG, PDAM and other dinas	IT 1-3	all local governments	IT I-4 IT I-5 IT I-6	Finance Innovation and Mobilization Lead	Governance and SBC coordinators and governance and SBC specialists			X	Х	Х	Х	
		•	poor inclusive, climate resilien			l		1	n and Hygiene Services	Lead 8	1	r Servic	es Lead	d) 	
2	2.1	2.1.1 Apply workforce development framework to support service providers	Convene workshop on identification of capacity gap in domestic wastewater operators	IT 2-1	5 BTS staffs, 3 Sanitation Directorate, 30 staffs of UPTD/LG	IT 2-5 IT 2-6	Sanitation and Hygiene Services Lead	Gov coordinator			X				
2	2.1	2.1.1 Apply workforce development framework to support service providers	2. Provide technical assistance to Balai Teknik Sanitasi (BTS) in facilitating in-class and E- Learning for LLTT and IPLT development	IT 2-I	30 sanitation operators improved their performance	IT 2-5 IT 2-6	Sanitation and Hygiene Services Lead	Sanitation coordinator, Senior Sanitation engineer, gov coordinator, GIS specialist			×	X	X	X	X
2	2.1	2.1.1 Apply workforce development framework to support service providers	3. Develop training plan of BTS for sanitation operator and LG staff	IT 2-I	I training plan	IT 2-5 IT 2-6	Sanitation and Hygiene Services Lead	Sanitation coordinator, Senior Sanitation engineer			X				
2	2.1	2.1.1 Apply workforce development	4. Provide technical assistance to FORKALIM in continuing the cross learning amongst	IT 2-1	5 topics have been exchanged	IT 2-5 IT 2-6	Sanitation and Hygiene	Sanitation coordinator, senior sanitary			Х	Х	Х	Х	×

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
		framework to support service providers	sanitation operator on demand-based topics				Services Lead	engineer, communication specialist, finance specialist							
2	2.1	2.1.1 Apply workforce development framework to support service providers	I. Convene workshop on identification of gap in the capacity of Water Provider especially between PDAMs that are sick, less healthy, and healthy, and provide technical package support recommendations	IT 2-1	National Level, Province and all PDAM	IT 2-3 IT 2-6	Water Services Lead	NC Urban water, NC Resilient Water, Training Module Development Specialist, NC Innovative Finance, NC GESI	2.2.1, 1.1.3, 2.3.1		×				
2	2.1	2.1.1 Apply workforce development framework to support service providers	2. Supporting B-TAM and Akatirta for the socialization and implementation of the PDAM/BUMD Capacity Building Road Map, with a focus on competency-based training,	IT 2-1	National Level, Province and all PDAM	IT 2-3 IT 2-6	Water Services Lead	NC Urban water, NC Resilient Water, Training Module Development Specialist, NC Innovative Finance, NC GESI	2.2.1, 1.1.3, 2.3.1		×	X	×	×	X
2	2.1	2.1.1 Apply workforce development framework to support service providers	3. Supporting B-TAM and Akatirta to increase the number of instructors and managers by mainstreaming Gender in Increasing PDAM Performance and Staff skills	IT 2-1	all PDAM	IT 2-3 IT 2-6	Water Services Lead	NC Urban water, NC Resilient Water, Training Module Development Specialist, NC Innovative Finance, NC GESI	2.2.1, 1.1.3, 2.3.1		X	X	X	X	X
2	2.1	2.1.1 Apply workforce development framework to support service providers	4. Provide capacity building to B-TAM and Akatirta in order to realize the PDAM Training Center of Excellence including provide a technical support package tailored.	IT 2-I	B-TAM, Perpamsi, Akatirta	IT 2-3 IT 2-6	Water Services Lead	NC Urban water, NC Resilient Water, Training Module Development Specialist, NC Innovative	2.2.1, 1.1.3, 2.3.1		X	X	X	X	х

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
								Finance, NC GESI							
2	2.2	2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	I. Conduct a lessons learned exercise on the primary existing sanitation program such as LLTT, septic tank expansion through micro credit, and innovative IPLT design	IT 2-2		IT 2-5 IT 2-6	Sanitation and Hygiene Services Lead				Х	X	Х		
2	2.2	2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	2. Promoting PDAM as domestic wastewater operator	IT 2-2		IT 2-5 IT 2-6	Sanitation and Hygiene Services Lead				X	X	X	X	X
2	2.2	2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	3. Identify alternative/optimum for customer registration for LLTT billing where water bill is not possible	IT 2-2		IT 2-5 IT 2-6	Sanitation and Hygiene Services Lead					X	X	X	×
2	2.2	2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	4. Identify IPLT conditions and capacity including recommendation and budget requirements and sources	IT 2-2		IT 2-5 IT 2-6	Sanitation and Hygiene Services Lead			X	Х				
2	2.2	2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	5. Promoting improvement of financial efficiency of potential UPTD to become BLUD	IT 2-2		IT 2-5 IT 2-6	Sanitation and Hygiene Services Lead				Х	Х	Х	X	Х
2	2.2	2.2.1: Develop portfolio approaches to improving	6. Facilitate 35 LGs in LLTT implementation	IT 2-2		IT 2-5 IT 2-6	Sanitation and Hygiene Services Lead				×	Х	×	×	X

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
		operational and financial efficiencies													
2	2.2	2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	7. Facilitate the collaboration amongst LGs for IPLT sharing	IT 2-2		IT 2-5 IT 2-6	Sanitation and Hygiene Services Lead					Х	X	Х	×
2	2.2	2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	I. Increase water access to poor through the collaboration with the Water Grant program which is supported by technical mapping, marketing and promotion, Inclusive Gender and data collection of poor community through mWater tool	IT 2-3	24 PDAM in 5 Province	IT 2-3 IT 2-6	Water Services Lead	NC Urban water, Training Module Development Specialist, NC Investment, NC SBC, NC GESI	1.2.2, 1.2.3, 2.1.1, 4.2.1, 4.3.1		X	X	Х	X	X
2	2.2	2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	2. Develop and Improve PDAM GIS/MIS	IT 2-2	17 PDAM in 5 Province	IT 2-3 IT 2-6	Water Services Lead	NC Urban water, Senior GIS/Mapping Specialist, Training Module Development Specialist	2.1.1		X	X	X	X	X
2	2.2	2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	3. Strengthening PDAM Capacity for NRW Reduction Program	IT 2-6	17 PDAM in 5 Province	IT 2-3 IT 2-6	Water Services Lead	NC Urban water, Training Module Development Specialist, Senior GIS/Mapping Specialist	1.2.2, 1.2.3, 2.1.1		X	X	X	X	х
2	2.2	2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	4. Strengthening PDAM Capacity for EE Improvement Program	IT 2-6	13 PDAM in 5 Province	IT 2-3 IT 2-6	Water Services Lead	NC Urban water, Training Module Development Specialist	1.2.2, 1.2.3, 2.1.1		Х	X	X	Х	х

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
2	2.2	2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	5. PDAM Business Plan Technical Assistance	IT 2-6	7 New PDAM Business Plan 5 review PDAM Business Plan	IT 2-3 IT 2-6	Water Services Lead	NC Urban Water, NC Governance, and NC Investment	1.2.2, 1.2.3, 2.1.1		X	X	X		
2	2.2	2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	6. Facilitate the fulfillment of Full Cost Recovery (FCR) tariff	IT 2-2	depending on the baseline data of PDAM Index	IT 2-3 IT 2-6	Water Services Lead	NC Urban Water, NC Governance and NC Innovative Finance, NC Investment	1.2.2, 1.2.3, 2.1.1		X	X	X		
2	2.2	2.2.1: Develop portfolio approaches to improving operational and financial efficiencies	7. Develop tools and Standard Operational Procedure/SOP (Finance, Technical, Customer Handling)	IT 2-2	depending on the baseline data of PDAM Index	IT 2-3 IT 2-6	Water Services Lead	NC Urban Water, NC Resilient Water, NC Innovative Finance	1.2.2, 1.2.3, 2.1.1			X	X	X	
2	2.3	2.3.1 Expand menu of service model options for PDAM and LG integration and adoption	I. Assessment and identification of technical needs for the development and improvement of SPAM services models (FS, RDS, and etc.) including community of potential beneficiaries which are possible to be supported by financing through APBD, APBN, and PSE	IT 2-3	depending on the baseline data of PDAM Index and Involve in SPAM Regional	IT 2-3 IT 2-2	Water Services Lead	NC Urban Water, NC Governance, NC Investment, NC PSE	1.2.2, 1.2.3, 2.1.1	Х	X				
2	2.3	2.3.1 Expand menu of service model options for PDAM and LG integration and adoption	2. Develop and promote a water resilience service model through PDAM Raw Water Quality and Quantity Monitoring (WQQ) including installation of CWIS (Climate and Water Information System)	IT 2-2	min 18 PDAM in 5 Province (government priority)	IT 2-3 IT 2-6	Water Services Lead	NC Resilient Water Services, WRM Lead, Senior GiS/Mapping Specialist	1.1.1, 3.3.2, 3.3.3		X				
2	2.3	2.3.1 Expand menu of service model options for PDAM	3. Develop and promote a water resilience service model through the Facilitated Water	IT 2-2	min 18 PDAM in 5 Province	IT 2-3 IT 2-6	Water Services Lead	NC Resilient Water Services, WRM Lead,	1.1.1, 3.3.2, 3.3.3		X	X	X	X	X

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
		and LG integration and adoption	Safety Plan (RPAM) and Training for senior PDAM managers to develop action plans and mobilize resources/skills (partly through twin arrangements) to manage risk and ensure business continuity		(government priority)			Senior GiS/Mapping Specialist							
2	2.3	2.3.1 Expand menu of service model options for PDAM and LG integration and adoption	4. Develop and Improve a water resilience service model through Zona Air Minum (ZAM) including improvement Chlorination system, Water Quality and Quantity Monitoring (WQQ) at Consumers	IT 2-3	depending on the baseline data of PDAM Index and Involve in SPAM Regional	IT 2-3 IT 2-2	Water Services Lead	NC Resilient Water Services, NC Urban Water	2.1.1, 2.2.1			X	X	X	X
2	2.3	2.3.1. Expand menu of service model for PDAM and LG integration and adoption	I. Identification of climate risk and climate adaptation concept to sanitation program	IT 01	draft concept of sanitation resilience in place		Sanitation and Hygiene Services Lead	NC Resilience Sanitation	3.1.1.						
2	23	2.3.1. Expand menu of service model for PDAM and LG integration and adoption	2.Preparation of capacity building on sanitation resilience	IT 01	material for capacity building in place		Sanitation and Hygiene Services Lead	NC Resilience Sanitation	3.1.1						
2	2.4	2.4.1: Support adoption of novel data systems by service providers	I. Provide technical assistance to Sanitation Directorate and local governments in monitoring safely managed sanitation access by integrated MIS	IT 2-2		IT 2-5 IT 2-6	Sanitation and Hygiene Services Lead	NC Urban Sanitation	2.2.1,		Х	Х	X	X	
2	2.4	2.4.1: Support adoption of novel data systems by service providers	2. Convene workshop on sanitation index review for performance monitoring of sanitation operator	IT 2-2		IT 2-5 IT 2-6	Sanitation and Hygiene Services Lead	Finance Lead, Gov coordinator, Sanitation coordinator	2.2.1, 1.3.1	X	Х	X	X	X	

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
2	2.4	2.4.1: Support adoption of novel data systems by service providers	3. Annual monitoring of sanitation operator by Sandex	IT 2-2		IT 2-5 IT 2-6	Sanitation and Hygiene Services Lead	Finance Lead, Gov coordinator, Sanitation coordinator	2.2.1, 1.3.1		X	X	×	×	X
2	2.4	2.4.1: Support adoption of novel data systems by service providers	I. Support Dit.AM - MoPWH and Contribute to develop national tools of PDAM Performance Indicator through MIS development (Novel Data)	IT 2-2	National Level: MoPWH	IT 2-3 IT 2-6	Water Services Lead	NC Urban Water, NC Governance, Finance lead	2.1.1	X	X	X			
2	2.4	2.4.1: Support adoption of novel data systems by service providers	Review and Improve PDAM     Performance Index tools	IT 2-2	National Level	IT 2-3 IT 2-6	Water Services Lead	NC Urban Water, NC Governance, Finance lead	2.1.1, 2.2.1	X					
2	2.4	2.4.1: Support adoption of novel data systems by service providers	Workshop annual monitoring of PDAM Performance Index	IT 2-2	Perpamsi and all PDAM	IT 2-3 IT 2-6	Water Services Lead	NC Urban Water, NC Governance, Finance lead	2.1.1, 2.2.1		X	X	X	X	X
Object	tive 3:	Improved WRM to S	Support Climate-Resilient Drin	king Water Se	rvices (Lead: W	/RM Lead)	WRM Lead								
3	3.1	3.1.1 Raise awareness of the impact of climate change on water availability for watershed stakeholders including national and local government, communities, utilities, and private sector	I. Develop materials for awareness raising building on materials in hands and (updated) data/information particularly from the Tim Teknis	IT 3-3		IT 3-6	WRM Lead			×	×				
3	3.1	3.1.1 Raise awareness of the impact of climate change on water availability for watershed	2. Meeting/socialization to the multi-stakeholder forum in particular on Objective 3 that is focused on WRM (topics will include water availability, water stress, climate risk, etc.).	IT 3-3		IT 3-6	WRM Lead			X	X				

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
		stakeholders including national and local government, communities, utilities, and private sector													
3	3.1	3.1.1 Raise awareness of the impact of climate change on water availability for watershed stakeholders including national and local government, communities, utilities, and private sector	3. As a follow up, meetings with stakeholders to identify area for intervention and collaboration (short, medium, long term). This may be established in MoU.	IT 3-3		IT 3-6	WRM Lead				x	x			
3	3.1	3.1.2 Map upstream water systems, downstream consumption patterns, and potential pollution sources, and prepare climateresilient water resource vulnerability assessments and action plans	I. Identification/delineation of watershed/recharge areas of raw water resources used by the PDAMs	IT 3-3		IT 3-5	WRM Lead			Х	×	X			
3	3.1	3.1.2 Map upstream water systems, downstream consumption patterns, and potential pollution sources, and	2. Consultation with related stakeholders (e.g. BBWS, Jasa Tirta, BPDAS) on results of the identification/delineation to get their confirmation and input	IT 3-3		IT 3-5	WRM Lead				X	X			

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
		prepare climate- resilient water resource vulnerability assessments and action plans													
3	3.1	3.1.2 Map upstream water systems, downstream consumption patterns, and potential pollution sources, and prepare climateresilient water resource vulnerability assessments and action plans	3. Prepare water resources vulnerability assessment including action planning through participatory process	IT 3-3		IT 3-5	WRM Lead				x	×	х		
3	3.1	3.1.2 Map upstream water systems, downstream consumption patterns, and potential pollution sources, and prepare climateresilient water resource vulnerability assessments and action plans	4. Integration of the action plan into each related entity's plan (e.g. business plan of PDAM, RenStra/RKPD of local government)	IT 3-3		IT 3-5	WRM Lead					X	X	X	Х
3	3.1	3.1.3 Promote private sector investment into WRM activities to protect natural assets and invest in green infrastructure	I. Work with CSR Forum to identify private entities/ corporations that have mandates/are interested in watershed (protection).	IT 3-3		IT 3-4	WRM Lead				X	X			

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
3	3.1	3.1.3 Promote private sector investment into WRM activities to protect natural assets and invest in green infrastructure	2. Prepare promotional materials (e.g. simpler version of VA & action plan) to attract private sector for collaboration specifically on watershed protection.	IT 3-3		IT 3-4	WRM Lead				X	X			
3	3.1	3.1.3 Promote private sector investment into WRM activities to protect natural assets and invest in green infrastructure	3. Develop concept for collaboration with private sector on WRM activities.	IT 3-3		IT 3-4	WRM Lead				×	×	X		
3	3.1	3.1.3 Promote private sector investment into WRM activities to protect natural assets and invest in green infrastructure	4. Work with provincial government to develop ideas/concept notes to be proposed for funding opportunities from BKF/GCF and/or BPDLH	IT 3-3		IT 3-4	WRM Lead					×	X	X	X
3	3.1	3.1.4: Implement and manage protection measures for watershed catchment areas to conserve biodiversity and water sources and improve sustainable water services	I. Develop action plan for specific actor and location	IT 3-3		IT 3-6	WRM Lead				x	х	Х	Х	
3	3.1	3.1.4: Implement and manage protection measures for	2. Engage LG, private sector, and community for implementation of the action plan throughout the planning,	IT 3-3		IT 3-6	WRM Lead					X	X	X	Х

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
		watershed catchment areas to conserve biodiversity and water sources and improve sustainable water services	implementation, and monitoring-evaluation phases												
3	3.1	3.1.4: Implement and manage protection measures for watershed catchment areas to conserve biodiversity and water sources and improve sustainable water services	3. Advocacy to LG and other stakeholders for replication in respective jurisdiction (district/city/province)	IT 3-3		IT 3-6	WRM Lead					×	X	X	X
3	3.1	3.1.5: Build capacity of local workforce to carry out watershed management activities such as construction of infiltration wells, improved sloping land management	I. Develop materials for training/capacity building on needed WRM activities. Partner with local university, Perpamsi, and related LG agency in this activity.	IT 3-3		IT 3-5	WRM Lead				X	Х			
3	3.1	3.1.5: Build capacity of local workforce to carry out watershed management activities such as construction of infiltration wells, improved sloping land management	2. Conduct ToT for key LG agencies, Perpamsi, and university to be pool of trainers	IT 3-3		IT 3-5	WRM Lead					X	Х		

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
3	3.1	3.1.5: Build capacity of local workforce to carry out watershed management activities such as construction of infiltration wells, improved sloping land management	3. Conduct training for various target groups (LG, community, private sector)	IT 3-3		IT 3-5	WRM Lead					X	X	×	
3	3.2	3.2.1: Establish or strengthen inclusive WRM committees including local government, private sector, communities, and utilities	I. Stakeholder consultation to identify existing WRM committee (if any) or key members of the committee and get the stakeholder's consent on WRM establishment/ strengthening	IT 3-2		IT 3-5	WRM Lead			X	×	×	×		
3	3.2	3.2.1: Establish or strengthen inclusive WRM committees including local government, private sector, communities, and utilities	2. Establishment or strengthening of the WRM committees. Establishment of the committee by mayor/head of district or head of key LG agency, e.g. Bappeda.	IT 3-2		IT 3-5	WRM Lead				X	X	X		
3	3.2	3.2.1: Establish or strengthen inclusive WRM committees including local government, private sector, communities, and utilities	3. Regular meetings/consultations with the committee on WRM activities.	IT 3-2		IT 3-5	WRM Lead				X	X	X	X	X
3	3.2	3.2.2: Provide awareness-raising and training for government officials and WRM	I. Develop awareness-raising and training materials that are gender inclusive and responsive. Development of the materials includes	IT 3-2		IT 3-6	WRM Lead				X	×			

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
		stakeholders on gender equity and inclusion, including gender-responsive budgeting	consultation with (LG) agency in charge of gender issues.												
3	3.2	3.2.2: Provide awareness-raising and training for government officials and WRM stakeholders on gender equity and inclusion, including gender-responsive budgeting	2. Conduct awareness-raising and training that are gender inclusive and responsive for LG officials and WRM stakeholders	IT 3-2		IT 3-6	WRM Lead				X	X			
3	3.2	3.2.2: Provide awareness-raising and training for government officials and WRM stakeholders on gender equity and inclusion, including gender-responsive budgeting	3. Support related LG agencies and WRM stakeholders on gender responsive WRM planning & budgeting	IT 3-2		IT 3-5	WRM Lead					Х	Х	Х	
3	3.2	3.2.3: Ensure that relevant WRM information and data are publicly available, including production from springs and water usage statistics	I. Work with WRM stakeholders on identification of data/information that may properly be accessed by public and will be useful for better WRM	IT 3-2		IT 3-6	WRM Lead				X	X			
3	3.2	3.2.3: Ensure that relevant WRM information and data are publicly available, including production from	2. Develop WRM data/information for public in various format, e.g. infographics, leaflet	IT 3-2		IT 3-6	WRM Lead				X	X	X		

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
		springs and water usage statistics													
3	3.2	3.2.3: Ensure that relevant WRM information and data are publicly available, including production from springs and water usage statistics	3. Work with WRM stakeholders that WRM data/information are updated from time to time and publicly available	IT 3-2		IT 3-6	WRM Lead				X	X	X	х	X
3	3.3	3.3.1: In partnership with BMKG, improve quality and accessibility of climate information and promote applied messaging for WRM decision makers	I. Consultation with BMKG and WRM stakeholders on needs for WRM data/information, e.g. type, quality, production of data/information, modes of dissemination	IT 3-2		IT 3-5	WRM Lead				X	Х			
3	3.3	3.3.1: In partnership with BMKG, improve quality and accessibility of climate information and promote applied messaging for WRM decision makers	2. Facilitation of BMKG to provide/improve/update the required WRM data/information	IT 3-2		IT 3-5	WRM Lead				Х	Х	Х		
3	3.3	3.3.1: In partnership with BMKG, improve quality and accessibility of climate information and promote applied messaging	3. Development of BMKG's data/information dissemination through agreed modes, e.g. website, SMS, WhatsApp group, Android apps	IT 3-2		IT 3-5	WRM Lead					X	X	X	

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
		for WRM decision makers													
3	3.3	3.3.2: Provide PDAMs with a real- time groundwater and surface water monitoring information system	I. Work with PDAM to identify the needs for groundwater and/or surface water monitoring	IT 3-2		IT 3-5	WRM Lead				Х	Х			
3	3.3	3.3.2: Provide PDAMs with a real- time groundwater and surface water monitoring information system	2. Collaborate with partners who have capacity and/or mandate to conduct groundwater and surface water monitoring, e.g. local university, LG, related ministry's office in charge of monitoring system	IT 3-2		IT 3-5	WRM Lead				×	×	×	×	
3	3.3	3.3.2: Provide PDAMs with a real- time groundwater and surface water monitoring information system	3. Support the PDAM in accessing the monitoring data and use it in their operation and planning	IT 3-2		IT 3-5	WRM Lead					X	X	X	X
3	3.3	3.3.3: Develop and equip a citizen scientist program to raise awareness of WASH/WRM data use and monitor water quality and quantity	I. Support stakeholders in monitoring effluent of ST, Communal ST, IPLT in catchment area	IT 3-2		IT 3-6	Sanitation and Hygiene Services Lead	Sanitation Coordinator, WRM lead			X	X	X	X	X
3	3.3	3.3.3: Develop and equip a citizen scientist program to raise awareness of WASH/WRM data use and monitor water quality and quantity	2. Engage local community and/or CSO/NGO in water quality and quantity monitoring through awareness raising, training, and their participation in the monitoring	IT 3-2		IT 3-6	WRM Lead				Х	X	X		

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
3	3.3	3.3.3: Develop and equip a citizen scientist program to raise awareness of WASH/WRM data use and monitor water quality and quantity	3. Establish communication (channel) between citizen scientist and PDAM on the monitoring	IT 3-2		IT 3-6	WRM Lead					×	×		
3	3.4	3.4.1: Conduct gap analysis in policies and regulations for improved watershed-level WRM	I. Stakeholder consultation to identify existing WRM policies/regulation, gaps, and needs for improved WRM	IT 3-I		IT 3-5	WRM Lead			X	X	X			
3	3.4	3.4.1: Conduct gap analysis in policies and regulations for improved watershed-level WRM	2. Work with key WRM stakeholders to draft required WRM policies/regulation starting with development of academic paper	IT 3-1		IT 3-5	WRM Lead					Х	Х		
3	3.4	3.4.1: Conduct gap analysis in policies and regulations for improved watershed-level WRM	3. Consultation with broader stakeholder that may include local parliament and mayor/head of district and/or governor	IT 3-1		IT 3-5	WRM Lead					Х	X		
3	3.4	3.4.2: Strengthen the enabling environment for watershed management and improve WRM capacity for upstream and downstream users	I. Legislation of the draft regulation as identified and developed under 3.4.1	IT 3-I		IT 3-5	WRM Lead					X	X		
3	3.4	3.4.2: Strengthen the enabling environment for watershed	Develop technical guidelines for more operational mode on how WMR improvement shall be conducted	IT 3-I		IT 3-5	WRM Lead					X YEAR I	X	X	1 93

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
		management and improve WRM capacity for upstream and downstream users													
3	3.4	3.4.2: Strengthen the enabling environment for watershed management and improve WRM capacity for upstream and downstream users	3. Socialization of the policy/regulation to related LG agencies and stakeholders	IT 3-I		IT 3-5	WRM Lead					×	×	X	
3	3.4	3.4.3: Ensure that climate-resilient WRM is integrated into government plans and budgets at all levels	I. Work with LG in improving/integrating WRM in the planning/budgeting cycle, e.g. Musrenbang, RPJMD, Renja OPD, RKPD	IT 3-I		IT 3-4	WRM Lead				Х	Х	Х	Х	×
3	3.4	3.4.3: Ensure that climate-resilient WRM is integrated into government plans and budgets at all levels	2. Support related LG agencies in implementation of the WRM plan, e.g. ITangguh providing technical support at implementation on the ground	IT 3-I		IT 3-4	WRM Lead					Х	Х	Х	X
3	3.4	3.4.3: Ensure that climate-resilient WRM is integrated into government plans and budgets at all levels	3. Monitoring-evaluation of implementation of the WRM activities and provide feedbacks to related (LG) agencies, e.g. for replication in more locations	IT 3-I		IT 3-4	WRM Lead					X	Х	X	Х
			of Behaviors and Improved Wo				Social and B	Sehavior Change L	ead						
4	4.1	4.1.1: Develop SBC strategies targeted to sustainable sanitation systems	I. Development of SBC strategy and action plan	IT 4-2		IT 4-4 IT 4-5	Social and Behavior Change Lead	SBC National Coordinator		×					

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
4	4.1	4.1.2: Increase household demand for WASH services	Community engagement and empowerment to analyze WASH and WRM issues and develop action plan as well as engaging key stakeholders	IT 4-2		IT 4-4 IT 4-5	Social and Behavior Change Lead	SBC National Coordinator		Х	X	×	×	×	
4	4.1	4.1.2: Increase household demand for WASH services	3. Engaging enterprises to support household WASH access	IT 4-2		IT 4-5	Social and Behavior Change Lead	SBC National Coordinator			X	X	X	X	
4	4.2	4.2.1 Develop an SBC campaign for payment for water and sanitation services	I. Utilization of #TetanggaPanutan and development of key behavior to support WRM campaign (in addition to the existing WASH key behavior)	IT 4-2		IT 4-4	Social and Behavior Change Lead	SBC National Coordinator		Х	X				
4	4.2	4.2.1 Develop an SBC campaign for payment for water and sanitation services	2. Development of SBC materials	IT 4-2		IT 4-4	Social and Behavior Change Lead	SBC National Coordinator		×	X				
4	4.2	4.2.1 Develop an SBC campaign for payment for water and sanitation services	3. Community engagement	IT 4-2		IT 4-4	Social and Behavior Change Lead	SBC National Coordinator		×	×				
4	4.2	4.2.1 Develop an SBC campaign for payment for water and sanitation services	4. Development of marketing and promotion strategy to improve WASH services	IT 4-I		IT 4-4	Social and Behavior Change Lead	SBC National Coordinator, Water Services Lead, Sanitation and Hygiene Services Lead, WRM Lead		X	×				
4	4.2	4.2.2 Engage different media channels, influencers, and content providers	I. Engagement of media and communication channels	IT 4-2	I million people reach through SBC campaign for WASH and	IT 4-4	Social and Behavior Change Lead	SBC National Coordinator, Media Engagement Specialist		Х	X	Х	X	×	

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Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
4	4.2	4.2.2 Engage different media channels, influencers, and content providers	2. Collaboration with national and local media (collaborative program to promote WASH and WRM that also integrate with GESI)	IT 4-2	WRM resilience	IT 4-4 IT 4-5	Social and Behavior Change Lead	Media Engagement Specialist		Х	×	X	×	×	
4	4.2	4.2.2 Engage different media channels, influencers, and content providers	3. Broadcast WASH and WRM contents through different media channels	IT 4-2		IT 4-4	Social and Behavior Change Lead	Media Engagement Specialist		Х	X	X	X	×	Х
4	4.3	4.3.1 Accelerate gender integration and women's agency in WASH and WRM sectors	I. Develop GESI strategy and action plan to ensure women involvement in decision making and men participation on hygiene promotion and practices	IT 4-5		IT 4-5	Social and Behavior Change Lead	GESI National Coordinator		Х					
4	4.3	4.3.1 Accelerate gender integration and women's agency in WASH and WRM sectors	2. Gender analysis to portrait gender roles in community decision making and institutional decision making	IT 4-5		IT 4-5	Social and Behavior Change Lead	GESI National Coordinator		X	×				
4	4.3	4.3.1 Accelerate gender integration and women's agency in WASH and WRM sectors	3. Design inclusive WASH Facilities	IT 4-5		IT 4-5	Social and Behavior Change Lead	GESI National Coordinator, Water Services Lead, Sanitation and Hygiene Services Lead, WRM Lead		X	X	X			
4	4.3	4.3.1 Accelerate gender integration and women's agency in WASH and WRM sectors	4. Improving women's knowledge and skill to manage WASH facilities	IT 4-3	5000 persons trained	IT 4-5	Social and Behavior Change Lead	GESI National Coordinator, SBC National Coordinator, National Coordinator Governance, Water Services Lead, Sanitation and Hygiene Services Lead,		X	Х	х	x	X	

Objective	Outcome	Task	Sub-task	Indicator Contribution (if any)	Output(s) - (Quantified where possible)	Outcome contribution	Lead Personnel (choose one)	Supporting Personnel (enter multiple)	Dependencies/Linkages to other tasks (if any)	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
								WRM Lead, Finance Innovation and Mobilization Lead							
4	4.3	4.3.1 Accelerate gender integration and women's agency in WASH and WRM sectors	5. Establish GRBP regulation and KPIs	IT 4-5		IT 4-5	Social and Behavior Change Lead	GESI National Coordinator		X	×	×	×	×	
4	4.5	4.3.1 Accelerate gender integration and women's agency in WASH and WRM sectors	6, Staff training and capacity building on GESI	IT 4-3		IT 4-5	Social and Behavior Change Lead	GESI National Coordinator		X	×	×			

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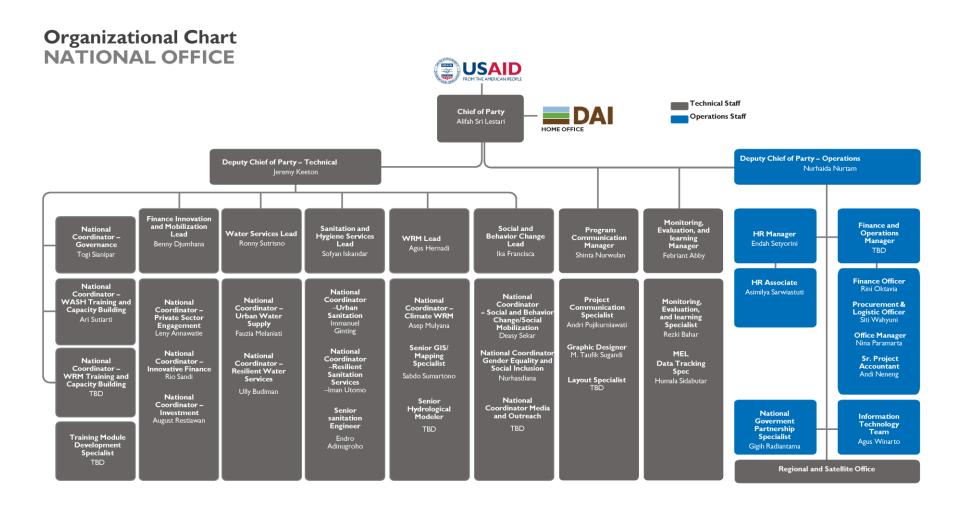
#### ANNEX 2. USAID IUWASH TANGGUH SCENARIO ON SUPPORT TO SHORTLISTED LOCATIONS

	_		_			_	Туре	of Scenario Suppo	rt
No ·	Province		Shortlisted Location	Watershed Area (Bold = Priority DAS)	Cities and districts will receive full support	Cities and district will receive water supply focus	Cities and district will receive sanitation focus	Cities and district will receive WRM focus	Remarks
I	North Sumatra	I	Medan city				$\sqrt{}$	V	Implementation of regular desludging program     Encourage to implement the KKMA developed under IPLUS
2		2	Binjai city	Deli		V			Improve PDAM Performance and expansion of piping network under MEBIDANG
3		3	Deli Serdang district			V	$\sqrt{}$		<ul><li>Expand the operation of regular desludging;</li><li>Improve PDAM Performance</li></ul>
4		4	Pematang Siantar city		√				
5		5	Simalungun district	Mbahbolon		V		V	Improve PDAM Performance     Conduct climate vulnerability assessment and actions plan
6	Banten	-	Tangerang city	Cisadane		$\sqrt{}$	$\sqrt{}$		Expansion of piping network under Karian
7		2	Tangerang district	Cisadane and Ciujung		V	√		Regional Water Supply system  Implementation of Regular desludging program
8		3	Tangerang Selatan city	Cisadane		$\sqrt{}$	V		
9	DKI Jakarta	Ι	DKI Jakarta province	Citarum, Ciliwung			$\checkmark$	$\sqrt{}$	Implementation of Regular desludging program     Develop partnership upstream and downstream area
10	West Java	I	Bogor district	Ciliwung, Cisadane		<b>V</b>	V	V	Improve PDAM Performance (continuation of NRW & EE Program under PBG)     Implementation of Regular Desludging program     Replication of KKMARA to other raw water source
11		2	Depok city			V	<b>V</b>		Improve PDAM Performance (continuation of NRW & EE Program under PBG)     Implementation of Regular Desludging program
12	West	ı	Pontianak city		V				implementation of Regular Desiraging program
13	Kalimantan (satellite)	2	Kubu Raya district	Kapuas		V			Improve PDAM Performance;
14		-	Surakarta city			V	V		Improve PDAM Performance (continuation of
15		2	Sukoharjo district			√	$\sqrt{}$		NRW & EE Program under PBG)  Implementation of Regular Desludging program
16	Central Java	3	Karanganyar district	Bengawan Solo		V		V	Improve PDAM Performance and expansion of
17	-	4	Wonogiri district			V		V	piping network under WOSOSUKAS  Conduct climate vulnerability assessment of PDAM raw water source

							Туре с	of Scenario Suppo	rt
No ·	Province		Shortlisted Location	Watershed Area (Bold = Priority DAS)	Cities and districts will receive full support	Cities and district will receive water supply focus	Cities and district will receive sanitation focus	Cities and district will receive WRM focus	Remarks
18		5	Sragen district		,	V	$\sqrt{}$		<ul> <li>Improve PDAM Performance and expansion of piping network under WOSOSUKAS</li> <li>Implementation of Regular Desludging program</li> </ul>
19		6	Magelang city	_	V				
20		7	Temanggung district	Progo		√		$\sqrt{}$	<ul> <li>Improve PDAM Performance</li> <li>Conduct climate vulnerability assessment of PDAM raw water source</li> </ul>
21		8	Salatiga city		V				
22	East Java	1	Surabaya city	-	V	V	.1		
23		3	Sidoarjo district  Gresik district			√ √	√ √		Improve PDAM Performance and expansion of piping network under UMBULAN Water Supply System
2.5		4	M-Iit		V				Implementation of Regular Desludging program
25		4	Malang city	-	V				L DDAMP (
26		5	Malang district	Brantas (hulu		$\checkmark$		$\sqrt{}$	<ul> <li>Improve PDAM Performance</li> <li>Conduct climate vulnerability assessment of PDAM raw water source</li> </ul>
27		6	Batu city	dan hilir)	V				
28		7	Blitar city	dan min )			$\sqrt{}$		Implementation of Regular Desludging program
29		8	Pasuruan city			√	$\sqrt{}$		<ul> <li>Improve PDAM Performance and expansion of piping network under UMBULAN Water Supply System</li> </ul>
30		9	Pasuruan district						<ul> <li>Improve PDAM Performance and expansion of piping network under UMBULAN Water Supply System</li> <li>Conduct climate vulnerability assessment of PDAM raw water source</li> </ul>
31	East Nusa		Kupang city						Conduct climate vulnerability assessment of
32	Tenggara (Satellite)	2	Kupang district	Manikin			,		PDAM raw water source
33	South Sulawesi		Makassar city	]		$\sqrt{}$	V		Improve PDAM Performance and expansion of
34		2	Maros district	Jeneberang		V	V		piping network under MAMMINASATA Water
35		3	Gowa district	Je. reber and		V			Supply System
36		4	Takalar district			√	√		Implementation of Regular Desludging program
37		5	Barru district	Karajae		√	<b>V</b>		<ul> <li>Improve PDAM Performance (continuation of NRW &amp; EE Program under PBG)</li> <li>Implementation of Regular Desludging program</li> </ul>
38	Papua (satellite)	-	Jayapura city	Memberamo		V	$\sqrt{}$		Improve PDAM Performance
39		2	Jayapura district	r lettibet attio		٧	$\sqrt{}$		Implementation of Regular Desludging program

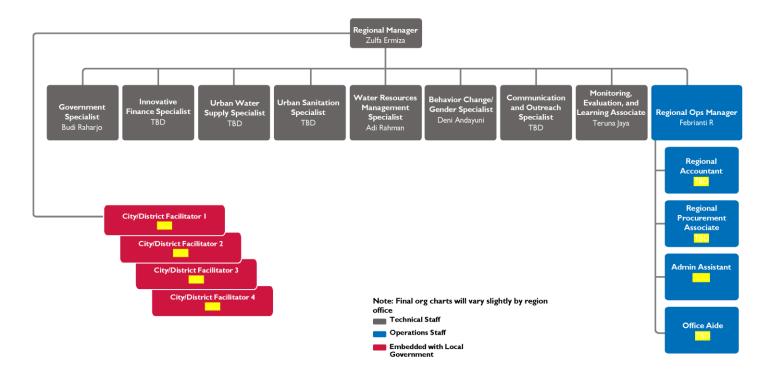
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#### ANNEX 3. ORGANIZATIONAL STRUCTURE AND MATRIX MANAGEMENT CHART

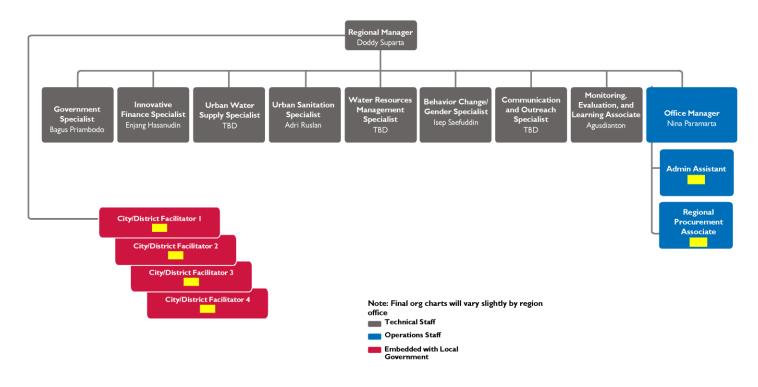


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## Organizational Chart NORTH SUMATRA REGIONAL OFFICE (NSRO)

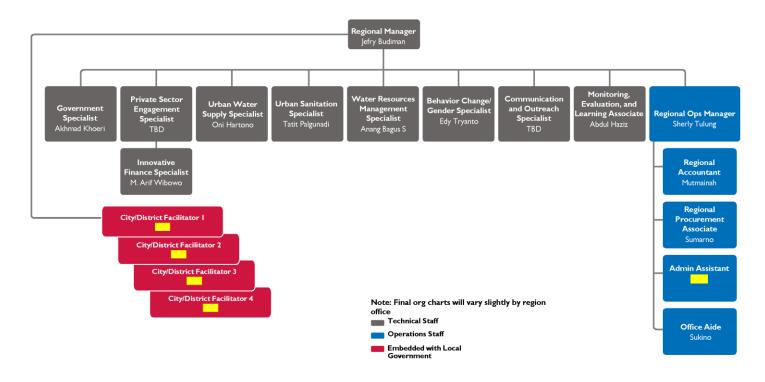


## Organizational Chart WEST JAVA, DKI JAKARTA AND BANTEN REGIONAL OFFICE (WJDB)

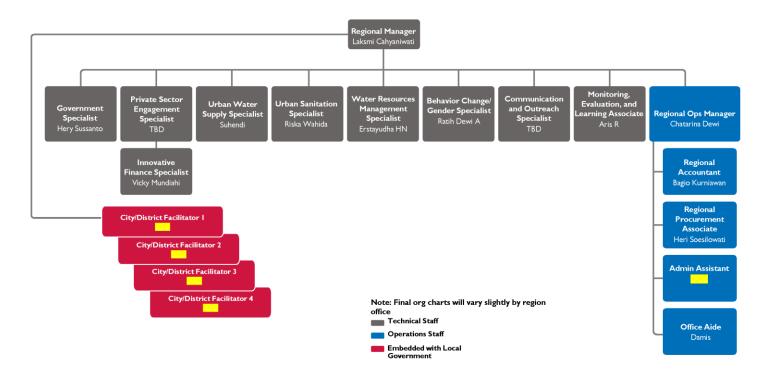


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## Organizational Chart CENTRAL JAVA REGIONAL OFFICE (CJRO)

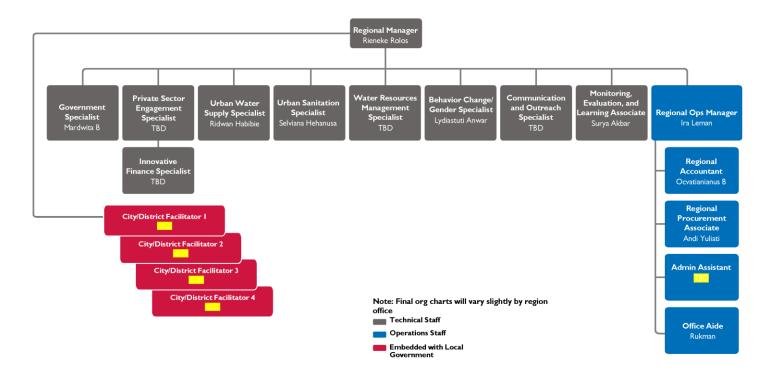


## Organizational Chart EAST JAVA REGIONAL OFFICE (EJRO)



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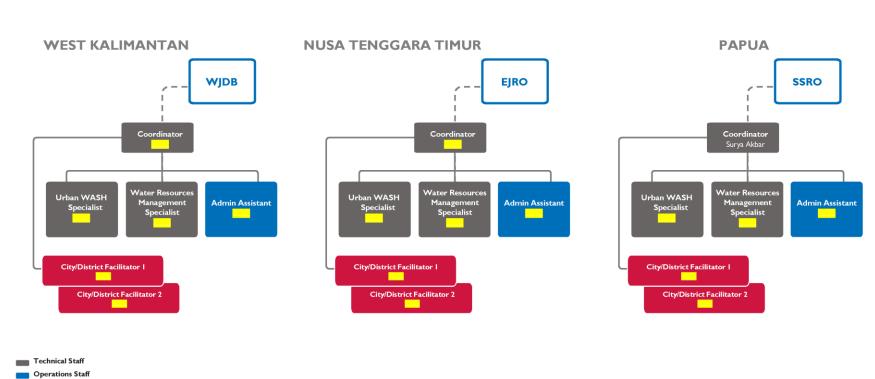
# Organizational Chart SOUTH SULAWESI REGIONAL OFFICE (SSRO)



# Organizational Chart SATELLITE OFFICE

Embedded with Local Government

Note: Specialist position technical areas will vary by satellite office



USAID IUWASH TANGGUH

PROJECT YEAR I WORK PLAN' | 107

# **USAID IUWASH Tangguh Matrix Management Chart**

Implementation / Functional Area	Day to Day Coordination	North Sumatra	West Java/ DKI/Tangerang - West Kalimantan	Central Java	East Java & NTT	South Sulawesi & Papua	Technical Support
OVERALL MANAGEMENT	_						
Program Management / Coord., COP	Alifah Lestari						n.a.
Program Operations and Regional Coordination, DCOP Operations	lda Nurtam	Zulfa Ermiza	Doddy Suparta	Jefry Budiman	Laksmi Cahyaniwati	Rieneke Rolos	n.a.
Program Technical - DCOP Technical	Jeremy Keeton						n.a.
TECHNICAL PROGRAM SUPPORT							
Activity Monitoring and Learning (AMEL)	Febriant Abby	TBD	TBD	TBD	TBD	TBD	Rezki Bahar
Program Communication	Shinta Nurwulan	TBD	TBD	TBD	TBD	TBD	Communication Team
Governance	Benny Djumhana	TBD	TBD	TBD	TBD	TBD	Togi Sianipar
Capacity Building	TBD	TBD	TBD	TBD	TBD	TBD	TBD
GESI	Ika Fransiska	TBD	TBD	TBD	TBD	TBD	TBD
Media Engagement and Outreach	Ika Fransiska	TBD	TBD	TBD	TBD	TBD	TBD
Environmental. Compliance	Sofyan Iskandar	TBD	TBD	TBD	TBD	TBD	TBD
Objective I : Strengthened WASH and	WRM Sector Gover	nance and Financin	g				Benny Djumhana
I.I Safely managed WASH and water security/WRM policies and regulation created or improved, implemented, monitored, and enforced at the national and regional government levels or improved, implemented, monitored, and enforced at the national and regional government levels		TBD	TBD	TBD	TBD	TBD	Togi Sianipar
I.2. Public and private budgets and expenditures that prioritize equitable, gender responsive, climate-resilient, and sustainable WASH and WRM services increased	Regional Manager	TBD	TBD	TBD	TBD	TBD	Rio Sandi
I.3. WASH and WRM sector institutional capacities increased		TBD	TBD	TBD	TBD	TBD	Lenny Annawatie
I.4. Increased accountability and inclusivity in WASH and WRM governance		TBD	TBD	TBD	TBD	TBD	August Restiawan

Implementation / Functional Area	Day to Day Coordination	North Sumatra	West Java/ DKI/Tangerang - West Kalimantan	Central Java	East Java & NTT	South Sulawesi & Papua	Technical Support
Objective 2 : Increased Access to Poor-	Inclusive, Climate R	esilient, Safety Man	aged Dringking Wat	er and Sanitation S	ervices		Sofyan Iskandar and Ronny Sutrisno
2.1. Capacity of professionalized WASH and WRM workforce increased		TBD	TBD	TBD	TBD	TBD	W: Fauziah Melaniati S: Immanuel Ginting
2.2. Performance of drinking water and sanitation service providers increased		TBD	TBD	TBD	TBD	TBD	W: Fauziah Melaniati S: Immanuel Ginting
2.3. City-wide inclusive, climate- resilient, and financially viable WASH and WRM institutional arrangements and service models established and expanded	Regional Manager	TBD	TBD	TBD	TBD	TBD	W: Nat Coord Ress Water (TBD) S: Nat Coord Ress San (TBD)
2.4. Monitoring, learning, and innovation platforms developed and strengthened		TBD	TBD	TBD	TBD	TBD	W: Fauziah Melaniati S: Immanuel Ginting
Objective 3: Improved WRM to Suppor	t Climate-Resilient	Drinking Water Ser	vices				Agus Hernadi
3.1. Improved water quality, quantity, and reliability in watersheds which supply raw water for drinking water services		TBD	TBD	TBD	TBD	TBD	Asep Mulyana
3.2. Increased accountability and equity in WRM and climate-resilient WASH regulatory and management arrangements	Regional Manager	TBD	TBD	TBD	TBD	TBD	Asep Mulyana
3.3. Expanded information, analysis, and advocacy for climate-resilient decision making in policy, programs, and operations	Regional Planager	TBD	TBD	TBD	TBD	TBD	TBD
3.4. Strengthened national and subnational GOI WRM policy, guidance, and programs to support resilient drinking water services		TBD	TBD	TBD	TBD	TBD	Togi Sianipar
Objective 4: Increased Adoption of Beh WRM	aviours and Improve	ed Women's Partici	pation and Leadersh	ip Roles that Contr	ibute to Improveme	nts in WASH and	Ika Fransiska
4.1. Latrine use, maintenance, and desludging behaviors adopted and become social regulated norms	Pagional Manager	TBD	TBD	TBD	TBD	TBD	Deasy Sekar
4.2. Payment for equitable and accountable water and sanitation services becomes the social norm	Regional Manager	TBD	TBD	TBD	TBD	TBD	Deasy Sekar

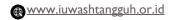
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Implementation / Functional Area	Day to Day Coordination	North Sumatra	West Java/ DKI/Tangerang - West Kalimantan	Central Java	East Java & NTT	South Sulawesi & Papua	Technical Support
4.3. Institutional prioritization, commitment, and participation in WASH and WRM sector improvements, including for poor-inclusive and data-driven decision making, increased		TBD	TBD	TBD	TBD	TBD	TBD
Program Operations							
Finance and Admin Management		Febrianti Ridwan	Nina Paramarta	Charles Testerna	Characian David	l l	TBD
Human Resources		redrianti Kidwan	ININA PARAMARTA	Sherly Tulung	Chatarina Dewi	Ira Leman	Endah Setyorini
Finance / Acct.	Degional Managan	TBD	TBD	TBD	TBD	TBD	TBD
Procurement	Regional Manager	TBD	Eva Silvana	Sumarno	Heri Susilowati	Andi Yulianti	Siti Wahyuni
Logistics/Ops		TBD	TBD	TBD	TBD	TBD	Johan Satari
Inform. Tech.		TBD	TBD	TBD	TBD	TBD	Agus Winarto

# USAID INDONESIA URBAN RESILIENT WATER, SANITATION, AND HYGIENE (IUWASH TANGGUH)

Mayapada Tower I, 10<sup>th</sup> Fl Jl. Jend. Sudirman Kav. 28 Jakarta 12920 Indonesia

Tel. +62-21 522 0540











USAID IUWASH Tangguh

USAID INDONESIA URBAN RESILIENT WATER, SANITATION, AND HYGIENE (IUWASH TANGGUH)

# PROJECT YEAR I WORK PLAN

Attachment A
ENVIRONMENTAL MITIGATION AND MONITORING PLAN

JULY 01, 2022

USAID INDONESIA URBAN RESILIENT WATER, SANITATION, AND HYGIENE (IUWASH TANGGUH)

# PROJECT YEAR I WORK PLAN

# Attachment A ENVIRONMENTAL MITIGATION AND MONITORING PLAN

JULY 01, 2022

Program Title: USAID Indonesia Urban Resilient Water, Sanitation, And Hygiene

(IUWASH Tangguh) Activity

Sponsoring USAID Office: USAID/Indonesia

Contract Number: 72049722N00001

Contractor: DAI Global, LLC

Date of Publication: July 01, 2022

Author: DAI Global, LLC

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#### **ACRONYMS**

APBD Anggaran Pendapatan dan Belanja Daerah/Local Government Budget

AMELP Activity Monitoring, Evaluation & Learning Plan

APIK USAID Indonesia Climate Change Adaptation and Resilience Project

BAPPENAS Ministry of National Development Planning

BAST Berita Acara Serah Terima

B2B Business-to-business

Bottom 40 percent of the population in terms of wealth

BCC Behavior Change Communication

BDCF USAID/Indonesia Bilateral Development Cooperation Framework
BLUD Badan Layanan Umum Daerah/Regional Public Service Agency

BOT Build-Operate-Transfer

BTAM Balai Teknologi Air Minum/Agency for Water Technology

BTS Balai Teknik Sanitasi/Sanitation Technical Center

BUMD Badan Usaha Milik Daerah/Regional-owned Enterprises
BUMDes Badan Usaha Milik Desa/Village-owned Enterprises

COP Chief of Party

COR Contracting Officer's Representative

CSO Civil Society Organization

DAI Global, LLC.

DCOP Deputy Chief of Party

Dit. AM Direktorat Air Minum/ Water Supply Directorate

DRRM Disaster Risk Reduction and Management

EE Energy Efficiency

EMMP Environmental Mitigation and Monitoring Plan

EMS Environmental Management System

ERR Environmental Review Form
ERR Environmental Review Report

FAS Field Accounting System
FOM Field Operation Manual

FORKALIM Asosiasi Pengelola Air Limbah Domestik/Association of Domestic

Wastewater Operators

GESI Gender Equality and Social Inclusion
GIA Grant Implementation Agreement

Godex Governance Index

GOI Government of Indonesia

IE Impact Evaluation

IATPI Association of Sanitary and Environmental Engineering Indonesia

IRIS Integrated Resilient IUWASH Systems

ΙT Information Technology

IEE Initial Environmental Examination

**IUWASH** Indonesia Water, Sanitation and Hygiene

**IUWASH PLUS** IUWASH Penyehatan Lingkungan untuk Semua

Indonesia Urban Resilient Water, Sanitation, and Hygiene **IUWASH Tangguh** 

Ministry of Environment and Forestry **KLHK** 

Kominfo Ministry of Communication and Information Technology

LG Local Government

LLTT Layanan Lumpur Tinja Terjadwal/Regular Desludging Service

LTTA Long-Term Technical Assistance

M&E Monitoring and Evaluation MFI Microfinance Institution

MOF Ministry of Finance MOH Ministry of Health

**MOHA** Ministry of Home Affairs

**MPWH** Ministry of Public Works and Housing

**NPWP** Local Tax Identification Number

**NRW** Non-revenue Water

**NUWSP** World Bank National Urban Water Supply Project

**PDAM** Perusahaan Daerah Air Minum/Municipal Drinking Water Company

**PANRB** Ministry of Administrative and Bureaucratic Reform

**PERPAMSI** National Association Of Water Utilities

PIF Partnership Innovation Fund PPP Public Private Partnership

**PSDA** Pengelolaan Sumber Daya Air/Water Resource Management

PTIN Project Task ID Number

**PUPR** Pekerjaan Umum dan Perumahan Rakyat/Public Works and Housing

PYI Project Year I

REDD+ Reducing Emissions from Deforestation and Forest Degradation Plus

**RFO** Request for Quotations

**RPIMN** Rencana Pembangunan Jangka Menengah Nasional/National Medium Term

Development Plan

**RPIMD** Rencana Pembangunan Jangka Menengah Daerah/Regional Medium Term

Development Plan

Sandex Sanitation Index

**SBC** Social and Behavior Change SDG Sustainable Development Goal

SNI Standar Nasional Indonesia/Indonesia National Standard

SOP Standard Operating Procedure SOO Statement of Qualification

SOW Scope of Work

SPAM Sistem Penyediaan Air Minum/Water Supply System

SPM Standar Pelayanan Minimum/Minimum Service Standards

STTA Short-Term Technical Assistance

**TAMIS** Technical and Administrative Management Information System

TOCO Task Order Contracting Officer

TOCOR Task Order Contracting Officer's Representative

TOT Training of Trainers

USG United States Government

**USAID** United States Agency for International Development

**UPTD** Unit Pelaksana Teknis Daerah/Regional Technical Implementing Unit

**WASH** Water, Sanitation, and Hygiene WRM Water Resource Management

ZAM Zona Air Minum/ Drinking Water Service Area

**ZAMP** Zona Air Minum Prima/Safe Drinking Water Service Area

#### I. INTRODUCTION

USAID Indonesia Urban Resilient Water, Sanitation, and Hygiene (USAID IUWASH Tangguh) is a five-year Activity to advance Indonesia's development goals in increasing access to safely managed drinking water, sanitation and hygiene (WASH) in vulnerable urban areas and strengthening climate-resilient WASH services and water resources management. In close partnership with the Government of Indonesia (GOI), USAID IUWASH Tangguh supports Indonesia's work to achieve their Sustainable Development Goal (SDG) targets to ensure access to water and sanitation for all (SDG 6) and to make cities and settlements inclusive, safe, resilient, and sustainable (SDG 11).

Using an Integrated Resilient IUWASH Systems (IRIS) approach—which aligns actions and incentives between upstream and downstream actors, while crowding in collaboration with key stakeholders through partnerships that accelerate the enabling environment and key enabling factors, such as finance and data—the USAID IUWASH Tangguh team will provide technical assistance to GOI, private sector and civil society stakeholders to achieve four objectives: I) Strengthened WASH and WRM Sector Governance and Financing; 2) Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services; 3) Improved Water Resources Management to Support Resilient Drinking Water Services; and 4) Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements of WASH and WRM.

#### 2. PURPOSE

USAID, in ADS 204.1 Environmental Procedures, requires implementation of environmental sustainability measures which must be mainstreamed into all interventions to avoid inadvertent harm to people and nature. Within the goal and objectives of this Activity, the EMMP must integrate measures to mitigate potential negative consequences of a changing climate, weak governance, social and environmental impacts, including additional analyses, as necessary. Additionally, USAID, in ADS 201Climate Risk Management Procedures, requires the Contractor to articulate practices and interventions that can enable climate resilient approach to succeed and support the sustainability of the investment made under this activity.

To strengthen implementation of USAID's environmental policy requirements, this EMMP outlines a system to monitor environmental and social safeguards throughout the life of USAID IUWASH Tangguh. The environmental and social safeguards take into account relevant international obligations, national circumstances, laws, policies, and regulations. USAID IUWASH Tangguh will regularly provide monitoring updates on implementation of EMMP through quarterly and annual reports, and as requested by USAID.

This EMMP also provides information essential to assessing the potential impacts of interventions, and to the identification and detailed design of appropriate mitigation and monitoring measures. Finally, we look at climate risks in the Climate Risk Matrix drawing from USAID's IEE of the USAID IUWASH Tangguh Activity for those contractual tasks identified as having a moderate climate risk.

In the Annexes of this EMMP, we present an environmental review form (ERF) and management system that the team will use to screen any activities deemed to present a risk beyond those

classified as categorical exclusions. USAID IUWASH Tangguh will be responsible for any sub-award screening and ensuring compliance with the ERF, checklists, and ongoing monitoring of all activities.

# 3. ENVIRONMENTAL REVIEW OF USAID IUWASH TANGGUH ACTIVITIES

United States Government (USG) Environmental Policies and Procedures

Pursuant to the Foreign Assistance Act (FAA) of 1961, USAID provides development assistance in the form of technical advisory services, research, training, construction and commodity support. USAID also conducts programs to combat hunger and malnutrition and to facilitate economic development. Assistance programs are carried out under the foreign policy guidance of the Secretary of State and in cooperation with the governments of sovereign states. In accordance with sections 118(b) and 621 of the FAA, as amended, it is USAID's policy is to:

- Ensure that the environmental consequences of USAID financed activities are identified and considered by USAID and the host country prior to a final decision to proceed and that appropriate environmental safeguards are adopted;
- 2. Assist developing countries to strengthen their capabilities to appreciate and effectively evaluate the potential environmental effects of proposed development strategies and projects, and to select, implement and manage effective environmental programs;
- 3. Identify impacts resulting from USAID's actions upon the environment, including those aspects of the biosphere which are the common and cultural heritage of all mankind; and
- 4. Define environmental limiting factors that constrain development, identify, and carry out activities that assist in restoring the renewable resource base on which sustained development depends.

The environmental procedures for USAID are promulgated as Title 22 of the Code of Federal Regulations, Part 216 (22 CFR 216). Except as provided in Section 216.2(b), these procedures apply to all new projects, programs or activities authorized or approved by USAID and to substantive amendments or extensions of ongoing projects, program, or activities. USAID's Automated Directives System (ADS) Parts 201.5.10g and 204 require that the potential environmental impacts of USAID-financed activities are identified prior to a final decision to proceed and that appropriate environmental safeguards are adopted for all activities.

An Initial Environmental Examination (IEE) is typically prepared as part of the program design process (e.g., Project Appraisal Document) by the sponsoring Bureau within USAID for non-exempted activities. The IEE will include a Threshold Decision to determine if the proposed activities have the potential to result in significant environmental impacts and/or if the activities are categorically excluded from additional review because they are the types of activities that are not likely to have an environmental impact. A Positive Threshold Decision results from the finding that the proposed action will have a significant effect on the environment and will require either the preparation of an Environmental Impact Statement pursuant to Section 216.7 or an Environmental Assessment pursuant to Section 216.6. Alternatively, a Negative Determination will be recorded if the proposed action will not have a significant effect on the environment.

In February 2022, USAID/Indonesia completed an IEE for USAID/Indonesia Urban Resilient Water, Sanitation, and Hygiene (USAID IUWASH Tangguh) that was planned to commence from FY 2022. The purpose of IEE was to provide first review of reasonably foreseeable environmental effects and climate risk ratings and recommend Threshold Decision for USAID IUWASH Tangguh. The IEE assesses potential environmental impacts and makes recommended determinations by activity type organized around the project's objectives. The IEE concluded that certain activities anticipated under USAID IUWASH TANGGUH merited a "categorical exclusion" per Title 22, Code of Federal Regulations, Part 216 (22CFR216) while others fell into the category of "negative determination with conditions".

Pursuant to 22 CFR 216.2(c)(2), activities recommended for **Categorical Exclusion** include:

- education, technical assistance, or training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities, etc.)
- analyses, studies, academic, or research workshops and meetings
- document and information transfers
- studies, projects, or programs intended to develop the capability of recipient countries to engage in developing planning, except to the extent designed to result in activities directly affecting the environment

Climate risk rating:

Exhibit I. Risk rating

	PROBABILITY OF NEGATIVE IMPACT (increases from left to right)		
SEVERITY OF NEGATIVE	Low probability Low impact LOW RISK	Moderate probability Low impact LOW RISK	High probability Low impact LOW RISK
(increases from top to bottom)	Low probability Moderate impact LOW RISK	Moderate probability Moderate impact MODERATE RISK	High probability Moderate impact MODERATE RISK
,	Low probability High impact MODERATE RISK	Moderate probability High impact HIGH RISK	High probability High impact HIGH RISK

Low climate risk – the above table indicates four scenarios (in green) that would be considered low climate risk to the achievement or sustainability of project or activity outcomes. As an example, in a region expecting slight increases in temperature and precipitation, favoritism influencing the provision of assistance after crop failure may pose a low risk to a governance initiative focused on anti-corruption reform in the judiciary (low probability, low impact). Moderate climate risk - the above table indicates three scenarios (in orange) that would be considered moderate climate risk to the achievement or sustainability of project or activity outcomes. An example of a moderate climate risk is the potential consequence of increasing sea surface temperature, causing coral reef bleaching and subsequent reduction in wild fish populations, on a coastal fisheries management and food security program (moderate probability, moderate impact). High climate risk – the above table indicates two scenarios (in red) that would be considered high climate risk to the achievement or sustainability of project or activity outcomes. An example of a high climate risk is damage due to sea level rise coupled with increasing storm surge on planned coastal transportation infrastructure (high probability, high impact).

The following exhibit provides the environmental determinations for activities under each component:

Objective	Illustrative Key Activities	Environmental Determinations	Climate Risk Rating
Objective I: Strengthened WASH and WRM sector governance and financing	Outcome 1.1. Safely managed WASH and water security/WRM policies and regulation created or improved, implemented, monitored, and enforced at the national and regional government levels	Categorical exclusion, Negative Determination with conditions	Low
	Outcome 1.2. Public and private budgets and expenditures that prioritize equitable, gender-responsive, climate-resilient, and sustainable WASH and WRM services increased.	Categorical exclusion, Negative Determination with conditions	Low
	Outcome 1.3. WASH and WRM sector institutional capacities increased	Categorical exclusion	Low
	Outcome 1.4. Increased accountability and inclusivity in WASH and WRM governance	Categorical exclusion	Low
Objective 2: Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services	Outcome 2.1. Capacity of professionalized WASH and WRM workforce increased.	Categorical exclusion	Low
	Outcome 2.2. Performance of drinking water and sanitation service providers increased	Categorical exclusion	Low
	Outcome 2.3. City-wide inclusive, climate-resilient, and financially viable WASH and WRM institutional arrangements and service models established and expanded.	Categorical exclusion	Moderate
	Outcome 2.4. Monitoring, learning, and innovation platforms developed and strengthened.	Categorical exclusion	Low
Objective 3: Improved Water Resources Management to Support Resilient Drinking Water Services	Outcome 3.1. Improved water quality, quantity, and reliability in watersheds which supply raw water for drinking water services	Categorical exclusion	Moderate
	Outcome 3.2. Increased accountability and equity in WRM and climate-resilient WASH regulatory and management arrangements.	Categorical exclusion	Moderate

Objective	Illustrative Key Activities	Environmental Determinations	Climate Risk Rating
	Outcome 3.3. Expanded information, analysis, and advocacy for climate-resilient decision making in policy, programs, and operations.	Categorical exclusion	Moderate
	Outcome 3.4 Strengthened national and subnational GOI WRM Policy, guidance, and programs to support resilient drinking water services	Categorical exclusion	Moderate
Objective 4: Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements in WASH and WRM	Outcome 4.1. Latrine use, maintenance, and desludging behaviors adopted and become social regulated norms	Categorical exclusion,	Moderate
	Outcome 4.2. Payment for equitable and accountable water and sanitation services becomes the social norm	Categorical exclusion	Low
	Outcome 4.3. Institutional prioritization, commitment, and participation in WASH and WRM sector improvements, including for poor-inclusive and datadriven decision making, increased.	Categorical exclusion	Low

As a general implementation and monitoring condition, the IEE requires the preparation of an Environmental Mitigation and Monitoring Plan (EMMP) for projects being implemented by USAID/Indonesia such as USAID IUWASH Tangguh. The EMMP provides a basis for systematic implementation of IEE conditions and serves as a vehicle for translating the broad, programmaticlevel IEE conditions into specific, implementable, verifiable actions that are relevant to the activity.

# 4. DETAILED SCREENING OF USAID IUWASH TANGGUH YEAR I ACTIVITIES

The discussion below is organized around USAID IUWASH Tangguh's four objectives, and further detailed for each Outcome and Task. Each section contains a brief discussion of the overall objective followed by illustrative tables that list the planned activities the project team anticipates supporting during Year I of the project (from April 4, 2022 – September 30, 2022).

#### 4.1. OBJECTIVE I- STRENGTHENED WASH AND WRM SECTOR GOVERNANCE **AND FINANCING**

4.I.I. OUTCOME I.I SAFELY MANAGED WASH AND WATER SECURITY/WRM POLICIES AND REGULATION CREATED OR IMPROVED, IMPLEMENTED, MONITORED, AND ENFORCED AT THE NATIONAL AND REGIONAL GOVERNMENT LEVELS

#### Task I.I.I - Develop and facilitate policies and regulations for improved WASH/WRM processes at national and local government levels.

USAID IUWASH Tangguh will provide technical support to LGs, CSOs, user groups, and engaged citizens to support advocacy and revision of draft policy, legislation, and enforcement mechanisms in each jurisdiction. Areas of support will include water-use permitting and monitoring, monitoring and mapping tools for effluent monitoring, regulatory development for LG-owned companies providing integrated drinking water and wastewater services, and promotion and enforcement of national onsite sanitation design and construction standards and permitting and inspection systems. While training, capacity building, policy, and strategy development, are activities that do not have a pronounced effect on the natural or physical environment, regulatory activities can affect the environment as poor design of WASH facilities and WRM policies can lead to contamination of surface and groundwater or impacts on water resources.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Identify the existing regulations of the water-use permitting and monitoring tools and other high-priority activities and outputs; and find the gaps for the basis of following activities.	Categorical exclusion (studies)
Meet with Bappenas and MOF to update the WASH microfinance financing program being supported by USAID IUWASH PLUS and set a plan for codifying the revised process. It also to update the existing regulatory development process for establishing the value added tax (VAT) exemption for domestic wastewater tariff.	Categorical exclusion (technical assistance)
Identify the potential support to MOHA, SUDP2 directorate for SPM mainstreaming, review, scaling up (products/documents for LG to include: SPM guidelines, implementation and monitoring tools)	Negative Determination with Conditions (Technical assistance directly affecting the environment)
Identify the potential support to MOHA, office of BLUD, BUMD, BUMDES directorate for promoting UPTD into BLUD organization for sanitation services; (products/documents for LG to include: BLUD establishment guidelines, implementation and monitoring tools)	Negative Determination with Conditions (Technical assistance directly affecting the environment)

#### Task 1.1.2 - Prioritize pathways for passage and implementation of draft policy and regulations.

USAID IUWASH Tangguh will prioritize issues that offer the most promise for reform, work with reform advocates/champions in selected national government agencies and support the passage of priority draft policies and regulations through targeted technical assistance, including through training, capacity building, policy and strategy development, formulating standard procedures and roadmap development. During Year I, no activities are planned under this Task.

#### Task 1.1.3 - Stimulate participation of diverse stakeholders in broader policy reform and enforcement initiatives agenda.

To leverage public support for policy development, regulations, and other reforms in WASH and WRM, USAID IUWASH Tangguh will organize inclusive stakeholder consultations to ensure that there is a transparent process for commenting on pending government policy and regulation through meetings and discussions with local stakeholders. During Year I, no activities are planned under this Task.

#### 4.1.2. OUTCOME 1.2 - PUBLIC AND PRIVATE BUDGETS AND EXPENDITURES THAT PRIORITIZE EQUITABLE, GENDER RESPONSIVE, CLIMATE-RESILIENT, AND SUSTAINABLE WASH AND WRM SERVICES INCREASED

#### Task I.2.I - Improve data flows to identify financial flows and gaps at the WASH/WRM sectoral level.

To address the challenges involved in budget allocation and expenditures, USAID IUWASH Tangguh will develop a sector financial flow tracking system improve the visibility and understanding of tariff structures, operations and maintenance expenses, and capital improvement programs.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Develop a plan involving the LG to create a model or tool of data flows to identify financial flow and gaps of WASH and WRM sectors	Categorical exclusion (studies)

#### Task 1.2.2 - Support financial planning and analysis at LG, PDAM, and UPTD service provider levels.

USAID IUWASH Tangguh will provide tailored technical assistance to LG institutions and PDAMs to collect and analyze annual, raw LG budget data and complete a strategic financial planning exercise to identify, analyze, and prioritize expenditures and required investments in their WASH/WRM development plan.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Identify the preliminary potential water improvement projects to be financed, such as the small-scale water hibah program provided by GOI and regionalized water supply system (SPAM) through discussion with Ministry of Public Works and Housing	Categorical exclusion (workshops and meetings)
Identify local budget (APBD) information of WASH and WRM expenditures for analysis and advocacy material for LG and other purposes	Categorical exclusion (studies)

#### Task 1.2.3 - Identify financing opportunities and create pipeline of WASH-/WRMrelated investments.

USAID IUWASH Tangguh will develop a pipeline of viable WASH/WRM investment opportunities by focusing on two transaction workstreams: I) development of a portfolio of "partnership" investments generated from a prioritized list of projects from LGs and PDAMs that meet specific screening criteria; and 2) development of an "ecosystem" of transactions generated from the venture capital and investor/operator community.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Identify potential projects with LG/PDAM to be listed in the pipeline	Categorical exclusion (workshops and meetings)
	Negative Determination with Conditions

#### 4.1.3. OUTCOME 1.3 - WASH AND WRM SECTOR INSTITUTIONAL CAPACITIES **INCREASED**

#### Task I.3.1 - Build capacity of WASH/WRM coordination institutions.

USAID IUWASH Tangguh will conduct institutional capacity assessments focused on how and where best to strengthen internal processes, protocols, and capabilities, and collaborate with training institutions to conduct mentoring and exchange visits for WASH service providers.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
In collaboration with sectors and SBC objective to develop the revision of the existing indices (GODEX, SANDEX and PDAM index) to add the WRM and GRDP parameters to measure the increase	Categorical exclusion (technical assistance)
Meet with Bappenas to identity the activities of supporting LG for setting the RPJMD target to achieve the RPJMN 2020-2024 target for WASH	Categorical exclusion (technical assistance)
Identify the possible improvement of WASH and WRM institutions through the training institutes such as BTAM under MPWH. Similarly, the sanitation sector will involve the FORKALIM to identify potential training activities.	Categorical exclusion (technical assistance)

#### 4.1.4. OUTCOME 1.4 - INCREASED ACCOUNTABILITY AND INCLUSIVITY IN WASH AND WRM GOVERNANCE

#### Task I.4.I - Expand mechanisms to promote social accountability and inclusivity.

USAID IUWASH Tangguh will strengthen accountability and inclusivity in WASH/WRM governance, including governance, water utility and sanitation indices, expand citizen engagement mechanisms, develop advocacy and communication materials.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Identify existing GODEX and add the parameter of accountability and inclusivity in	Categorical exclusion
WASH and WRM governance	(technical assistance)

### 4.2. OBJECTIVE 2- INCREASED ACCESS TO POOR-INCLUSIVE, CLIMATE-RESILIENT, SAFELY MANAGED DRINKING WATER AND SANITATION **SERVICE**

### 4.2.1. OUTCOME 2.1 - CAPACITY OF PROFESSIONALIZED WASH AND WRM WORKFORCE **INCREASED**

### Task 2.1.1 - Apply workforce development framework to support service providers.

USAID IUWASH Tangguh will conduct workshops, provide technical assistance, development improvement plans, and create tools to strengthen the capacity of WASH service providers' staff.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Convene workshop on identification of gap in the capacity of Water Provider especially between PDAMs that are sick, less healthy, and healthy, and provide technical package support recommendations	Categorical exclusion (workshops and meetings)
Conducting FGDs and meetings on Capacity Building Road Map for PDAM/BUMD with BTAM-Dit.AM MPWH, Perpamsi and Akatirta	Categorical exclusion (technical assistance)
Consultation with Balai Teknik Sanitasi (BTS), Sanitation Directorate of MPOW, and FORKALIM on LLTT training for wastewater operator and LG staffs	Categorical exclusion (workshops and meetings)

### 4.2.2. OUTCOME 2.2 - PERFORMANCE OF DRINKING WATER AND SANITATION SERVICE PROVIDERS INCREASED

### Task 2.2.1 - Develop portfolio approaches to improving operational and financial efficiencies.

USAID IUWASH Tangguh will take a data-driven approach to improving the operational efficiency and financial performance of PDAMs, prioritizing specific issues affecting the financial and operational health of each supported PDAM and implementing customized packages of practical support including technical assistance, training, and private sector contracting. For sanitation, USAID IUWASH Tangguh will provide technical support to scale the regulation and monitoring of desludging services.

While technical assistance and training are activities that do not have a pronounced effect on the natural or physical environment, USAID IUWASH Tangguh will assist WASH service providers to expand water and sanitation services, which, if managed poorly, could result in contamination of surface and groundwater supplies, spread waterborne disease, or contribute to the degradation of ecosystems.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Conducting FGDs and meetings with the Dit.AM MoPWH, Perpamsi, regarding the planning, agenda, and forms of collaboration related to the national program PBG-NUWSP (NRW/EE)	Categorical exclusion (workshops and meetings)
Collecting and analyzing data of safely managed sanitation coverage, existing operator of wastewater in LG, capacity of IPLT, and building communication with potential stakeholders such as Directorate of Sanitation, Balai Teknik Sanitasi, and FORKALIM	Categorical exclusion (studies)

### 4.2.3. OUTCOME 2.3 - CITY-WIDE INCLUSIVE, CLIMATE-RESILIENT, AND FINANCIALLY VIABLE WASH AND WRM INSTITUTIONAL ARRANGEMENTS AND SERVICE MODELS **ESTABLISHED AND EXPANDED**

### Task 2.3.1 - Expand menu of service model options for PDAM and LG integration and adoption

USAID IUWASH Tangguh will support service delivery, stimulate investment, expand appropriate WASH and WRM service models, such as sanitation desludging service, water security plan, and pilot safe drinking water service area or ZAMP through a consultation process with community and service providers. Installation of new water connections, small scale water and sanitation facilities, as well as desludging service when managed poorly could result in contamination of surface and groundwater supplies, spread waterborne disease, or contribute to the degradation of ecosystems.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Conducting FGDs and meetings with the Dit.AM MPWH, Perpamsi, Akatirta regarding the planning, agenda, and forms of collaboration that will be carried out, related RPAM and ZAM priority	Categorical exclusion (workshops and meetings)
Identification of climate risk and climate adaptation concept to sanitation programs	Categorical exclusion (technical assistance)
Preparation of capacity building materials on sanitation resilience for internal USAID IUWASH Tangguh team	Categorical exclusion (technical assistance)

### 4.2.4. OUTCOME 2.4 - MONITORING, LEARNING, AND INNOVATION PLATFORMS **DEVELOPED AND STRENGTHENED**

#### Task 2.4.1 - Support adoption of novel data systems by service providers

USAID IUWASH Tangguh will integrate relevant water supply and sanitation service data systems for use by service providers and LGs that help them accomplish their work, mainstreaming collection and use of data in daily operation and decision making by PDAMs, regulators, and government agencies.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Preparing the PDAM Performance Index tools and FGDs and meetings with Dit.AM MoPWH, to assess the needs of MIS PDAM Performance Indicators	Categorical exclusion (technical assistance)
Communication with Sanitation Directorate	Categorical exclusion (workshops and meetings)
Convene workshop on sanitation index review for performance monitoring of sanitation operator	Categorical exclusion (technical assistance)
Convene workshop on baseline of index in all participating local governments	Categorical exclusion (technical assistance)

### 4.3. OBJECTIVE 3- IMPROVED WATER RESOURCES MANAGEMENT TO SUPPORT RESILIENT DRINKING WATER SERVICES

### 4.3.1. OUTCOME 3.1 - IMPROVED WATER QUALITY, QUANTITY, AND RELIABILITY IN WATERSHEDS WHICH SUPPLY RAW WATER FOR DRINKING WATER SERVICES

Task 3.1.1 - Raise awareness of the impact of climate change on water availability for watershed stakeholders including national and local government, communities, utilities, and private sector.

USAID IUWASH Tangguh will carry out a series of stakeholder consultations, public-private dialogues, community outreach, and youth environmental education activities to raise awareness of the impact of climate change on future availability of water resources, as well as potential solutions.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Develop materials for awareness raising building on materials in hands and (updated) data/ information	Categorical exclusion (technical assistance)
Conduct a series of stakeholder consultations with key government and local government agencies	Categorical exclusion (workshops and meetings)
Incorporation of data, knowledge, and practices from the consultation into: a. SBC strategy development (4.1.1) and b. approach for campaigning and key stakeholder (4.2.2)	Categorical exclusion (technical assistance

### Task 3.1.2 - Map upstream water systems, downstream consumption patterns, and potential pollution sources, and prepare climate-resilient water resource vulnerability assessments and action plans

USAID IUWASH Tangguh will provide technical assistance to LGs, PDAMs, and universities to improve the mapping of water systems and consumption patterns. USAID IUWASH Tangguh will work with universities and institutes to downscale global climate models to provide localized predictions and to develop hydrological models to help water service providers understand the capacity of current infrastructure to cope with these impacts.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Support LGs, PDAMs, and universities to improve mapping of water system and consumption patterns	Categorical exclusion (studies)

### Task 3.1.3 - Promote private sector investment into WRM activities to protect natural assets and invest in green infrastructure

USAID IUWASH Tangguh will share with businesses the results from watershed systems mapping and work to co-create solutions. USAID IUWASH Tangguh will work with local governments to develop proposals to access green investment and facilities such as the Green Climate Fund and green bonds. When these activities lead to private sector investments in green infrastructure, there will be potential negative to the environment which USAID IUWASH Tangguh will assess and ensure the project proponents will address accordingly. During Year I, no activities are planned under this Task.

### Task 3.1.4 - Implement and manage protection measures for watershed catchment areas to conserve biodiversity and water sources and improve sustainable water services

In partnership with government, businesses, and communities, USAID IUWASH Tangguh will implement activities in watersheds, including in water catchment areas for springs to reduce run-off and increase groundwater recharge. Such small-scale construction activities and use of test kit for water quality monitoring, installation of infiltration ponds and implementation of raw water protection measures have the potential to cause adverse impacts that can offset or eliminate the intended benefit. During Year I, no activities are planned under this Task.

### Task 3.1.5 - Build capacity of local workforce to carry out watershed management activities such as construction of infiltration wells, improved sloping land management

USAID IUWASH Tangguh will work in conjunction with local government and experts from local universities, to provide hands-on training and certification in skills such as infiltration well construction, sloping land management, climate-smart agriculture, and installation and construction of gabions. During Year I, no activities are planned under this Task.

### 4.3.2. OUTCOME 3.2 - IMPROVED WATER QUALITY, QUANTITY, AND RELIABILITY IN WATERSHEDS WHICH SUPPLY RAW WATER FOR DRINKING WATER SERVICES

### Task 3.2.1 - Establish or strengthen inclusive WRM committees including local government, private sector, communities, and utilities.

USAID IUWASH Tangguh will establish a platform to engage local government leadership and train the groups on advocacy, diversity and equity, and the utilization of climate projection and water resource data to inform decision making.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Stakeholder consultation to identify existing WRM committee (if any) and get the stakeholder's consent on WRM establishment/ strengthening	Categorical exclusion (workshops and meetings)
Develop platform for the committee to engage regularly with LG	Categorical exclusion (technical assistance)

### Task 3.2.2 - Provide awareness-raising and training for government officials and WRM stakeholders on gender equity and inclusion, including gender-responsive budgeting.

USAID IUWASH Tangguh will train government officials on diversity, equity and inclusion with regard to WRP, including gender responsive budgeting, and collaborate with women groups to have a voice in decision making, planning and funding allocation. During Year 1, no activities are planned under this Task.

### Task 3.2.3 - Ensure that relevant WRM information and data are publicly available, including production from springs and water usage statistics.

USAID IUWASH Tangguh will ensure access and information regarding water resources is publicly available and facilitate meetings to strengthen feedback loops from the community. During Year I, no activities are planned under this Task.

### 4.3.3. OUTCOME 3.3 - EXPANDED INFORMATION, ANALYSIS, AND ADVOCACY FOR CLIMATE-RESILIENT DECISION MAKING IN POLICY, PROGRAMS, AND OPERATIONS

### Task 3.3.1 - In partnership with BMKG, improve quality and accessibility of climate information and promote applied messaging for WRM decision makers.

USAID IUWASH Tangguh will create and disseminate climate information specific to WRM and train decision makers to access, understand and use the information. During Year I, no activities are planned under this Task.

### Task 3.3.2 - Provide PDAMs with a real-time groundwater and surface water monitoring information system.

USAID IUWASH Tangguh will develop a real time groundwater and surface water monitoring information system for water utilities and collaborate with local universities to develop low-cost water utility water quality testing options. While training and capacity building activities do not have a pronounced effect on the natural or physical environment, use of test kits for water quality monitoring when implemented ineffectively may cause adverse impacts, such as from the mishandling of the chemicals, reagents and equipment. During Year I, no activities are planned under this Task.

### Task 3.3.3 - Develop and equip a citizen scientist program to raise awareness of WASH/WRM data use and monitor water quality and quantity.

USAID IUWASH Tangguh will raise awareness on water resource issues and collaborate with the community to collect data on climate, weather and water quality, parepare water curriculum and provide test kit material and training. While training and capacity building activities do not have a

pronounced effect on the natural or physical environment, use of test kits for water quality monitoring when implemented ineffectively may cause adverse impacts, such as from the mishandling of the chemicals, reagents and equipment.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Desk review of the "waterkeeper" organization in the US	Categorical exclusion (studies)
Identification and selection of local watershed and the community	Categorical exclusion (technical assistance)
Facilitate the formation of CSO on local watersheds protection	Categorical exclusion (technical assistance)

### 4.3.4. OUTCOME 3.4 - STRENGTHENED NATIONAL AND SUBNATIONAL GOI WRM POLICY, GUIDANCE, AND PROGRAMS TO SUPPORT RESILIENT DRINKING WATER **SERVICES**

### Task 3.4.1 - Conduct gap analysis in policies and regulations for improved watershedlevel WRM.

USAID IUWASH Tangguh will engage experts to analyze existing regulation and policies regarding WRM and produce recommendations for streamlining approaches to WRM.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Engage local expert from universities to analyze existing regulations and policies regarding WRM	Categorical exclusion (workshops and meetings)
Consultation with stakeholders on policy gaps in WRM (Directorate DAS KLHK, BMKG, Direktorat Adaptasi Perubahan Iklim KLHK, PSDA, PUPR)	Categorical exclusion (workshops and meetings)

### Task 3.4.2 - Strengthen the enabling environment for watershed management and improve WRM capacity for upstream and downstream users.

USAID IUWASH Tangguh will facilitate collaboration between multiple government administrations located within geographical watersheds to improve management and develop agreements. During Year I, no activities are planned under this Task.

### Task 3.4.3 - Ensure that climate-resilient WRM is integrated into government plans and budgets at all levels.

USAID IUWASH Tangguh will work with local government and community members to include climate resilient WASH and WRM in the village budget, including improved water storage, improved water piping system and access points as well as infiltration wells. Such small-scale construction activities and use of test kit for water quality monitoring, installation of infiltration ponds and implementation of raw water protection measures have the potential to cause adverse impacts that can offset or eliminate the intended benefit. During Year I, no activities are planned under this Task.

### 4.4. OBJECTIVE 4. INCREASED ADOPTION OF BEHAVIORS AND IMPROVED WOMEN'S PARTICIPATION AND LEADERSHIP ROLES THAT CONTRIBUTE TO IMPROVEMENTS IN WASH AND WRM

### 4.4.1. OUTCOME 4.1. LATRINE USE, MAINTENANCE, AND DESLUDGING BEHAVIOR **BECOME SOCIAL REGULATED NORMS**

### Task 4.1.1 Develop SBC strategies targeted to sustainable sanitation systems

USAID IUWASH Tangguh will develop SBC strategy in collaboration with MoH to increase latrine use, maintenance, and desludging behaviors and to enable adoption of the behaviors and the catalyzation to become social norms.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Consultation with MOH for input on SBC strategy	Categorical Exclusion (technical assistance)
Development of draft concept SBC strategy and action plan	Categorical exclusion (technical assistance)

#### Task 4.1.2 Increase household demand for WASH services

USAID IUWASH Tangguh SBC activities will focus on the engagement of community and empowering them to be able to analyze WASH and WRM conditions, develop and implement their action plan for better WASH and WRM conditions and engaging key stakeholders to advocate WASH access and better WASH services.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Identification of potential hot spot location by survey, interview local government official, lurah, and cadre	Categorical exclusion (studies)
Community assessment and site selection	Categorical exclusion (workshops and meetings)
Identifying potential enterprises to provide WASH services	Categorical Exclusion (technical assistance)

### 4.4.2. OUTCOME 4.2 PAYMENT FOR EQUITABLE AND ACCOUNTABLE WATER AND SANITATION SERVICES BECOME SOCIAL NORMS

### Task 4.2.1 Develop an SBC campaign for payment for water and sanitation services

USAID IUWASH Tangguh will engage key stakeholders to conduct an SBC campaign and advocate people to pay for water and sanitation services.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Engaging LGs and partners to promote Tetangga Panutan	Categorical exclusion (workshops and meetings)
Assessing WRM condition to understand the context and issues	Categorical exclusion (studies)
Development of key message <u>under umbrella of #TetanggaPanutan to promote WRM</u> including in consultation with Ministry of Environment and Forestry, MOH, and gathering input from other related stakeholder	Categorical Exclusion (technical assistance)

#### Task 4.2.2 Engage different media channel, influencer, and content provider

USAID IUWASH Tangguh will engage different media channels to broadcast WASH and WRM messages and utilize it to build awareness and furthermore create society's movement that lead to adoption of behavior change and the shifting of new social norms that contributes to better WASH and WRM conditions

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Development of Communication plan	Categorical Exclusion (technical assistance)
Consultation with Kominfo and PANRB to engage communication channels and the development of accountability and inclusivity platform	Categorical Exclusion (meetings and workshops)
Identify potential media and communication channels, including influencers and content creators	Categorical Exclusion (meetings and workshops)
Assessment potential collaboration with identified media and communication channels, including influencers and content creators	Categorical Exclusion (studies)

### 4.4.3. OUTCOME 4.3. INSTITUTIONAL PRIORITIZATION, COMMITMENT, AND PARTICIPATION IN WASH AND WRM SECTOR IMPROVEMENT, INCLUDING POOR INCLUSIVE FOR DATA DRIVEN DECISION MAKING, INCREASED

### Task 4.3.1 Develop GESI strategy and action plan to ensure women involvement in decision making and men participation on hygiene promotion and practices

USAID IUWASH Tangguh will integrate GESI on the program implementation that includes women involvement, improving knowledge and capacity building, and encourage women leadership on the decision making, both at community and institution.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Conduct Gender assessment and analysis	Categorical Exclusion (studies)
Consultation with Ministry of Women Empowerment and Child Protection, Gender working group at sectoral ministries	Categorical Exclusion (meetings and workshops)
Finalizing gender assessment and action plan	Categorical Exclusion (technical assistance)

### Task 4.3.2 Gender analysis to portrait gender roles in community decision making and institutional decision making

USAID IUWASH Tangguh will conduct gender assessment and analyze gender roles in WASH and WRM, both at community and institution. The portrait of gender roles in WASH and WRM will help USAID IUWASH Tangguh to better understand the gender roles and develop the appropriate program (targeting) that will ensure women involvement in decision making as well as the development of capacity building program for WASH and WRM workers.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Gathering data and information through group discussion	Categorical Exclusion (meetings and workshops)

# 5. PRELIMINARY ENVIRONMENTAL MITIGATION AND MONITORING PLAN (EMMP) AND CLIMATE RISK MITIGATION

#### 5.1. ENVIRONMENTAL IMPACT AND CLIMATE RISK MITIGATION AND MONITORING

The preliminary EMMP shown below lists potential areas of environmental risks based on the initial screening of USAID IUWASH Tangguh activities. Although, the majority of USAID IUWASH Tangguh tasks are not expected to result in adverse environmental impacts, and were recommended for Categorical Exclusion, a few activities indicated above require special considerations and actions to identify and mitigate potential adverse environmental impacts and considerations for mitigating climate risk. Exhibit 2 below lists those tasks categorized as Negative Determination with Conditions and Moderate Climate Risk. For each activity, the EMMP identifies potential adverse environmental impacts and the necessary steps the USAID IUWASH Tangguh team will take to mitigate these risks, monitor, and report on the results. If the mitigation measures outlined below are implemented, USAID IUWASH Tangguh supported activities are not expected to have any significant adverse impacts (and are likely to have beneficial impacts) on the environment.

Exhibit 3. Year	Exhibit 3. Year I Environmental Mitigation and Monitoring Plan					
Activity Type	Activity Category	Task	Potential Adverse Impact	Mitigation Measures	Monitoring Indicator	Monitoring Frequency
Outcome I.I S	afely Managed	WASH and Water Securit	y policies and regulation created or improved, imple	mented, monitored and enfor	ced at the national and local levels	
Policy improvement	Technical Assistance	I.I.I: Develop and facilitate policies and regulations for improved WASH/WRM processes at national and local government levels.	While training, capacity building, policy and strategy development, are activities that do not have a pronounced effect on the natural or physical environment, when the WASH facilities are poorly designed and not according to the standard, it can result in shorter service life of the facility, leakage, thus fecal contamination to surface and groundwater, and the facility may not be used by the community.	USAID IUWASH Tangguh will follow the SNI standards on water and wastewater facility construction and ensure that the design of the facilities will take into consideration the mandatory drinking water quality and domestic wastewater quality standards.	ITI-I (Number of new and/or revised laws, policies, regulations, or agreements in place that promote access to improved WASH services) will include verification that any new policies or regulations comply with SNI standards.	Annual

Task	Climate Risk	Opportunity	Climate Risk Management Options	Risk Addressing Activities	Project Implementation
Outcome 2.3. City-w	ide inclusive, climate-resilient, and fina	ncially viable WASH and WRM in	stitutional arrangements and se	rvice models established and e	xpanded
Task 2.3.1: Expand menu of service model options for PDAM and LG integration and adoption.	Floods (from stronger storms, inadequate waste management, and poor maintenance of drainage canals) could damage urban infrastructure, especially services delivery infrastructure, resulting in service disruptions, a need for increased or new Gol investments to repair damage, negative impacts on health, and potential loss of faith in Gol ability to deliver quality services  • Longer dry seasons and stronger storms in the rainy season could increase reliance on river and spring water by service providers (i.e., unsafe water supplies), which in turn could diminish raw water supplies; (e.g., cities are losing about 50% of spring water sources because of reliance on these sources to meet demands and expectations to increase coverage)  • Damaged pumps due to sea level rise and saltwater intrusion.  • Inundation of low-lying latrines and septic systems	Improve water and sanitation infrastructure and infrastructure services by making water and sanitation systems more resilient to future climate variability and change may also yield immediate results by addressing insufficient water and sanitation infrastructure and an inadequate supply of clean water and access to sustainable sanitation.  • The need to rebuild after extreme events may provide an opportunity to inventory and construct improved and more resilient water and sanitation infrastructure.  • Improve water conservation measures may reduce the need to transport water, which is energy intensive. Saving energy from transporting water will reduce greenhouse gas emissions.	Design urban WASH investments to "reach" more individuals potentially affected by climate change.  Interest in private sector to cope with climate stressors to increase operational security for investment  Large base of local knowledge and solutions that can provide models for scalable solutions in other areas	Identify changes in demographics, urbanization, and land use that could dictate a shift in WASH investments, particularly in the face of the exacerbating influence of climate change.  Identify and prioritize technologies for waterrelated adaptation.  Improve design and construction of water supply and sanitation infrastructure to account for the potential for climaterelated risks.  Improve water storage, conservation, and water demand management to account for climatedriven changes in supply and demand.	Climate consideration in the delivery of technical assistance and infrastructure siting during activity and project level implementation, reflected in the activity design and its associated environmental procedures and climate risk assessment

Task	Climate Risk	Opportunity	Climate Risk Management Options	Risk Addressing Activities	Project Implementation
	<ul> <li>Reduced access of marginalized populations to sanitation infrastructure due to flooding and extreme storm events.</li> </ul>				
	<ul> <li>High levels of suspended sediments, potentially exceeding water treatment capacity, due to flood waters.</li> </ul>				
	<ul> <li>Higher pollutant concentrations in surface waters and reduced efficiency of sanitation systems due to prolonged drought.</li> </ul>				
	<ul> <li>Lack of willingness to shift to piped water, potentially from insufficient raw water supplies, and continued use of groundwater based on failures of events</li> </ul>				
Outcome 3.1 Improve	ed water quality, quantity, and reliabili	ty in watershed which supply raw	water for drinking water service	ces	
Task 3.1.3: Promote private sector investment into WRM activities to protect natural assets and invest in green infrastructure.	Lack of priority and reduced resources for WASH/WRM activities due to diversion of private sector investment to address extreme events and other climate impacts.	Provides an opportunity to work with the Gol, at all levels, on water planning that includes climate risks and incorporates the interest of the private sector in helping to develop this sector and reach the 2030 Sustainable Development Goals.	Invest In Climate-Related Information Collection and Management Systems.  • Strengthen climate information systems, building on existing regional and national networks.	Develop a screening tool to assess the viability of green investments in each province, conforming with finance facility eligibility requirements from possible funding mechanisms such as green bonds or the Green Climate Fund [GCF]	Leverage existing private sector landscape assessment and existing relationships with companies such as Coca Cola, Nestle, and Cargill to promote long-term investments in climate-resilient WASH/WRM as part of sustainable business planning.

Task	Climate Risk	Opportunity	Climate Risk Management Options	Risk Addressing Activities	Project Implementation
Task 3.1.4: Implement and manage protection measures for watershed catchment areas to conserve biodiversity and water sources and improve sustainable water services.	Watershed management and water services in Indonesia are prone to floods, droughts, saltwater intrusion resulting in service delivery disruption and lack of clean water for the community. These issues have effects and outcomes that are exacerbated by climate change impacts on a range of spatial and temporal scales		<ul> <li>Build capacity of national governments to harmonize data across regions.</li> <li>Build relevant national and/or regional research programs on the links between climate and water supply and sanitation (e.g., vulnerability</li> </ul>	Collaborate with local stakeholders and enterprises to monitor groundwater levels and to attract climate financing and community buy in to implement the activities.	Implement activities in watersheds, including in water catchment areas for springs to reduce run-off and increase groundwater recharge, such as: , such as reforestation, construction of infiltration wells, and installation of weather and spring flow monitoring systems.
Task 3.1.5: Build capacity of local workforce to carry out watershed management activities such as construction of infiltration wells, improved sloping land management.	Reduced number of participants attending the capacity building activities as a result of infrastructure damage and community dislocation due to flooding or sea level rise.		(e.g., vulnerability index).	Work with local government and certification agency to recognize skilled WRM practitioners (individuals and businesses) and link them with government, donors, and businesses planning to invest in WRM activities.	Leverage knowledge from local universities, to provide hands-on training in skills such as infiltration well construction, sloping land management, climate-smart agriculture, and installation and construction of gabions.
Outcome 3.3 Expand	ed information, analysis, and advocacy	for climate-resilient decision maki	ng in policy, programs, and op	erations	
Task 3.3.2: Provide PDAMs with a real-time groundwater and surface water monitoring information system.	There is no regular monitoring and data base of groundwater level and water quality, as a result no early warning system for climatic and disaster risks that can be accessed by the water utilities.	Provides an opportunity to work with the Gol, at all levels, on water planning that includes climate risks and incorporates the interest of the private sector in helping to develop this sector and reach the 2030 Sustainable Development Goals.	<ul> <li>Invest In Climate- Related Information Collection and Management Systems.</li> <li>Strengthen climate information systems, building on existing regional and national networks.</li> </ul>	Develop a real-time groundwater and surface water monitoring information system for water utilities, national and regional agencies responsible for watershed management and WRM	Collaborate with technical ministries to develop data value chain, from generation, to analysis agregation, and visualization.

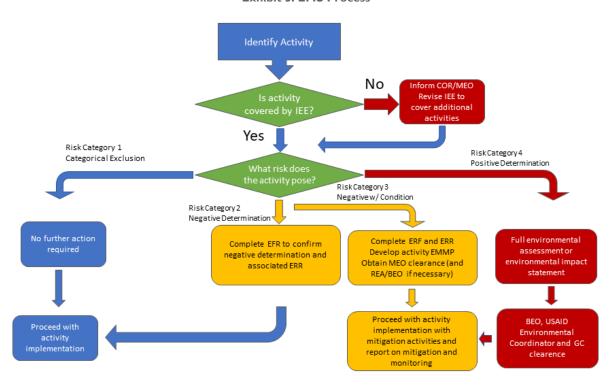
Exhibit 4. Year 1 Climate Risk Mitigation Plan					
Task	Climate Risk	Opportunity	Climate Risk Management Options	Risk Addressing Activities	Project Implementation
			<ul> <li>Build capacity of national governments to harmonize data across regions.</li> <li>Build relevant national and/or regional research programs on the links between climate and water supply and sanitation (e.g., vulnerability index).</li> </ul>		
Outcome 3.4. Strength Task 3.4.3: Ensure that climate-resilient WRM is integrated into government plans and budgets at all levels.	Lack of enforcement of government policies and regulations related to WASH/WRM due to diversion of government staff and resources to address extreme events and other climate impacts.	Provides an opportunity to work with the Gol, at all levels, on water planning that includes climate risks and incorporates the interest of the private sector in helping to develop this sector and reach the 2030 Sustainable Development Goals.	<ul> <li>Build capacity of national governments to harmonize data across regions.</li> <li>Build relevant national and/or regional research programs on the links between climate and water supply and sanitation (e.g., vulnerability index).</li> </ul>	Engage cities, districts, and provinces to influence their five-year planning and budgeting cycle	Work with local government and community members to include climate-resilient WRM activities in village budgets
Outcome 4.1 Latrines Task 4.1.1: Develop SBC strategies targeted to sustainable sanitation systems.	Reduced participation in sanitation and hygiene training and awareness-raising especially for women due to community disruption and	Reduce gender inequalities through efforts to increase of sanitation systems can support women in maintaining sanitary	Deliver social behavior change to improve public education and outreach efforts related to the importance of	Develop social behavior change for water security, sanitation and hygiene at the household, WASH	<ul> <li>Incorporate climate change assessment into activity planning and implementation.</li> </ul>

Exhibit 4. Year I Climate Risk Mitigation Plan					
Task	Climate Risk	Opportunity	Climate Risk Management Options	Risk Addressing Activities	Project Implementation
	dislocation due to flooding, sea level rise, and extreme events.  Increased public health risks due to inundation and overflow of latrines and septic systems caused by increased precipitation and storm events.  Increased incidence of waterborne infectious diseases due to higher temperatures and flooding.  Increased workload, time burden, and caloric expenditure for women and girls.	household conditions and reducing disease in themselves and their families.  Improved behaviors by making sanitation systems more resilient to future climate variability and change may also yield immediate results by addressing insufficient sanitation infrastructure	safe sanitation services to reduce the methane emission from unmanaged wastewater, and other factors relevant to sanitation-related climate impacts and adaptation.	institutional and local business levels to prevent inundation and overflow of latrines and septic systems caused by increased precipitation and storm events.  • Strengthen disaster planning and response for safely managed sanitation services.  • Education and behavior change components at the individual, community and government level regarding development of climate resilient cities.  • Community feedback system to provide impetus for governmental action with determined protocols	Climate consideration in the delivery of social behavior change for sustainable sanitation system (to include technical assistance and infrastructure siting) during activity and project level implementation, reflected in the activity design and its associated environmental procedures and climate risk assessment

### 6. IMPLEMENTING THE EMMP

#### 6.1. PROCEDURES

The USAID IUWASH Tangguh team will establish a comprehensive environmental management system (EMS) that will facilitate the team's implementation of USAID environmental guidelines. Exhibit 4 below shows the EMS process, and the steps the USAID IUWASH Tangguh team will follow in complying with USAID's Regulation 216 requirements.



**Exhibit 5. EMS Process** 

For each identified risk and associated set of mitigation actions, the USAID IUWASH Tangguh team will, prior to implementation, carry out an activity screening using the Environmental Review Form (ERF), shown in Annex I, and complete the Environmental Review Report (ERR). These documents will be incorporated in the TAMIS system. When the Contractor requests for obligation of fund approval from USAID these documents will be attached.

#### Step 1: Environmental Screening and Review

- Step 1.1 During initial activity planning with local partners, identify those activities under each Task and Sub-Task using the initial screening guide above that will require more thorough environmental reviews.
- Step 1.2 Create activity in Environmental Compliance Module in TAMIS (see below)
- Step 1.3 Determine activity type using ERF Step 3a (Annex 4) as applicable.
- Step 1.4 Determine activity type and risk category as follows:

- 1. Categorical Exclusion (Risk Category 1): activities that do not have an effect on the natural or physical environment. Review Annex I: Screening Tool for Activities with No Foreseen Risk, if ALL sub-project activities meet one or more of the criteria in the tool, no additional mitigation or monitoring ties are required. Proceed with activity.
- 2. Negative Determination (Risk Category 2): Activities with no significant adverse effects with normal good practices. Complete Environmental Review Form (ERF) confirming negative determination and associated Environmental Review Report.
- 3. Negative Determination with Conditions (Risk Category 3): Activities with potential adverse effects but which can be mitigated and monitored with normal good practices. Complete Environmental Review Form (ERF) confirming negative determination and associated Environmental Review Report. Develop activity EMMP incorporating applicable lines from USAID IUWASH Tangguh Project Environmental Mitigation, Monitoring and Reporting Plan (EMMP). Submit for USAID/Indonesia MEO for approval.
- 4. Positive Determination, High Risk Activities (Risk Category 4): Activities for high potential for adverse biophysical or health impacts. Activity will require IEE Amendment, Environmental Assessment or Environmental Impact Statement. Activity will require Bureau Environmental Officer (BEO), Agency's Environmental Coordinator, and the Office of General Counsel approval.

**Note –** we do not anticipate carrying out activities considered high risk under USAID IUWASH Tangguh

- Step 1.5 Develop Activity ERF per ERF instructions
- Step 1.6 Develop Activity ERR and Activity EMMP for activities with Risk Categories 2
- Step 1.7 **Prior to obligating any USAID funds**, USAID Environmental Officer's approval of the determination and threshold decisions as determined for those activities in Risk Categories 2, 3 and 4 will be submitted to the COR and Mission Environmental Officer (MEO) for approval.
- Step 1.8 Incorporate EMMP in implementing partner agreement or grant

The team will monitor and report on the results of the mitigation actions using the Environmental Mitigation and Monitoring Report (EMMR) that team members will fill out on a quarterly basis. The format of the EMMR is incorporated in the TAMIS system and each designated environmental officer in each region will complete the report in TAMIS on a quarterly basis.

#### Step 2: Environmental Mitigation and Monitoring

- Step 2.1 Review mitigation measures, responsibilities for implementation, responsibilities for monitoring with implementing partners and/or beneficiaries.
- Monitor implementation of mitigation measures as described in the activity EMMP. Step 2.2
- Step 2.3 Periodic review of implementation of mitigation measures.
- Activity EMMP Report filled. Reported to USAID quarterly while activities are Step 2.4 ongoing and at activity completion. Process data for reports.
- Step 2.5 At completion of activity, complete activity EMMP in TAMIS and mark activity as completed.

The Contractor will not undertake new activities outside the scope of the documents mentioned above before receiving written USAID approval of environmental documentation amendments. All proposed activities planned to be implemented in PY-I fall under either categorical exclusion and/or negative determination with conditions as defined in the USAID rules and regulation 22 CFR 216.

#### 6.2. ROLES AND RESPONSIBILITIES

Implementing the EMMP will require the USAID IUWASH Tangguh team to integrate environmental analysis, planning and monitoring into activity planning and carry it through activity implementation across all objectives of the activity. The USAID IUWASH Tangguh Deputy Chief of Party (DCOP) Technical will be responsible for ensuring USAID environmental compliance requirements are met. He will also work closely with project staff, partners, and sub-awardees to ensure that these environmental compliance considerations are incorporated into their project activities and to provide training when necessary on environmental impact awareness and planning. He will be assisted by the Objective Leads for the activities under their portfolio. Since USAID IUWASH Tangguh is a field-oriented project, much of the responsibility for integrating environmental analyses and monitoring into activity design will fall to the regional team leaders with backup support from the Jakarta-based technical teams.

The roles and responsibilities of the key project personnel for the environmental management and compliance of the project are summarized in Exhibit 5 below.

Exhibit 6. Roles and Respon	Exhibit 6. Roles and Responsibilities				
Person(s) responsible	Schedule	Tasks			
Regional Managers	<ul> <li>Screening all proposed activities in their resplanning staff to identify any potential environments.</li> </ul>				
	<ul> <li>Completing the Environmental Review Forr technical teams, define needed mitigation m activities.</li> </ul>				
	<ul> <li>Reviewing the implementation of mitigation project to improve performance and condu</li> </ul>	, ,			
	<ul> <li>Drafting required monitoring reports and p compliance with USAID environmental poli</li> </ul>				
	<ul> <li>Tracking ongoing activities and archiving co Compliance module in TAMIS.</li> </ul>	mpleted activities using the Environmental			
DCOP - Technical	<ul> <li>Supporting Regional Managers during the in that activities rated as low-risk and modera completed ERFs.</li> </ul>	,			
	<ul> <li>Participate in periodic reviews of USAID IU ensure that field teams are following projec monitoring guidelines.</li> </ul>				
	Conduct periodic site visits and ensure com	npliance.			
	<ul> <li>Mobilize technical expertise to support Reg their review of planned activities and develor activities.</li> </ul>				
	<ul> <li>Lead assessments of potential national imple their internal environmental review, mitigat</li> </ul>	ementing partners and grantees in terms of cion and monitoring processes.			

Exhibit 6. Roles and Respon	Exhibit 6. Roles and Responsibilities					
Person(s) responsible	Schedule	Tasks				
Urban Sanitation Specialist (EMMP Focal Point)	Periodically update the environmental mitigal in the region	tion and monitoring plan for all activities				
	<ul> <li>Ensure that all activities are comply with US/ monitoring of all activities in TAMIS</li> </ul>	AID environmental safeguard with				
	<ul> <li>Regularly check TAMIS to make sure that all compliance section, either categorical exclusions.</li> </ul>					
	<ul> <li>Provide input of environmental compliance a and annual report</li> </ul>	ctivity progress for bi-weekly, quarterly,				
	<ul> <li>Conduct regular meetings with environment regions for updating environmental safegua</li> </ul>					
	<ul> <li>Conducting field visit to check compliance in determination with condition activities</li> </ul>	the field especially for negative				
Technical, Objective 2 Sanitation and Hygiene	Support Urban Sanitation Specialist (EMMP F are comply with USAID environmental safeg	. ,				
Service Leads	Support EMMP Focal Point in TAMIS checking	g				
USAID TOCOR	Periodic site visits					
	Oversee project activities and monitor EMM	P compliance				

In order to incorporate environmental considerations throughout USAID IUWASH Tangguh implementation, activity partners and staff will be oriented to the activity's commitment to environmental impact mitigation and environmentally sustainable practices. Whenever possible, field staff will be encouraged to incorporate awareness-raising activities focused on environmental management and sustainable practices into assistance provided to beneficiaries.

#### 6.3. REPORTING

The USAID IUWASH Tangguh team shall report the status of environmental compliance issues and the implementation of required mitigation and monitoring measures. The report includes a review of progress of construction activities. The regular report will be included in the regular USAID IUWASH Tangguh report such as quarterly and annual reports to help determine if environmental mitigation and monitoring procedures are fully in place.

The USAID/Indonesia Mission Environmental Officer (MEO) and the USAID IUWASH Tangguh TOCOR shall make regular spot- check site visits to consult with program implementers; determine if associated mitigation and monitoring measures are being implemented; identify unforeseen impacts; and recommend adjustments in environmental mitigation and monitoring, as needed.

## **ANNEX**

### ANNEX I. ENVIRONMENTAL REVIEW FORM FOR USAID IUWASH TANGGUH **SUB-AWARDS**

## A. Applicant information

Organization	Parent award or project
	p. 6]666
Individual	Address, phone
contact and	& email (if
title	available)
Proposed Sub-	Amount of
award (brief	funding
description)	requested
	Period of
	performance
	Location(s) of
	proposed
	activities

## B. Activities, screening results, and findings

	Screening result		Findings			
	instructions)		(Step 6 of instructions.  Complete for all moderate/unknown and highrisk activities ONLY)			
Proposed activities (Provide DESCRIPTIVE listing. Continue on additional page if necessary)	Very Low Risk	High- Risk*	erate or unkn own	nt adverse impacts	With specified mitigation, significant adverse impacts are very unlikely	Significa nt Adverse impacts are possible
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						

<sup>\*</sup>These screening results require completion of an Environmental Review Report

#### C. Certification:

I, the undersigned, certify that:

- 1. The information on this form and accompanying environmental review report (if any) is correct and complete.
- 2. Implementation of these activities will not go forward until specific approval is received from the C/AOTR.
- 3. All mitigation and monitoring measures specified in the Environmental Review Report will be implemented in their entirety, and that staff charged with this implementation will have the authority, capacity and knowledge for successful implementation.

(Signature)	<u>(</u> Date)
(Print name)	(Title)

Note: if screening results for any activity are "high risk" or "moderate or unknown risk," this form is not complete unless accompanied by an environmental review report.

#### BELOW THIS LINE FOR USAID USE ONLY

#### Notes:

- I. For clearance to be granted, the activity MUST be within the scope of the activities for which use of the ERF is authorized in the governing IEE. Review IEE before signature. If activities are outside this scope, deny clearance and provide explanation in comments section. The Partner, C/AOTR, MEO and REA must then confer regarding next steps: activity re-design, an IEE or EA.
- 2. Clearing an ERF containing one or more findings that significant adverse impacts are possible indicates agreement with the analysis and findings. It does NOT authorize activities for which "significant adverse impacts are possible" to go forward. It DOES authorize other activities to go forward. The Partner, C/AOTR, MEO and REA must then confer regarding next steps: activity re-design, an IEE or EA.

#### Clearance record

C/AOTR  ☐ Clearance given ☐ Clearance denied	(print name)	(signature)	(date)
USAID/Indonesia MEO  ☐ Clearance given ☐ Clearance denied	(print name)	(signature)	(date)
Regional Env. Advisor (REA)  □ Clearance given □ Clearance denied	(print name)	(signature)	(date)

Bureau Env. Officer	(print name)	(signature)	(date)
(BEO)*			
☐ Clearance given			
☐ Clearance denied			

C/AOTR, MEO and REA clearance is required. BEO clearance is required for all "high risk" screening results and for findings of "significant adverse impacts possible. The BEO may review"

Note: if clearance is denied, comments must be provided to applicant (use space below & attach sheets if necessary)

### ANNEX 2. INSTRUCTIONS FOR ENVIRONMENTAL REVIEW OF USAID IUWASH **TANGGUH SUB-AWARDS**

Note: These instructions accompany the attached "Environmental Review Form for USAID IUWASH Tangguh Sub-award Activities" (ERF).

Step I. Provide requested "Applicant information" (Section A of the ERF)

Step 2. List all proposed activities

In Section B of the form, list all proposed activities.

Activities are a desired accomplishment or output: e.g. seedling production, road rehabilitation, school construction. Each activities has entailed actions for example, road rehabilitation includes survey, grading, culvert construction, compaction, etc. Be aware of these entailed actions, but do NOT list them.

List activities DESCRIPTIVELY. For example, "training" is not a sufficient activity listing. The listing must specify WHO is being trained, and in WHAT.

Step 3a. Screening: Identify low-risk and high-risk activities

For each activity you have listed in Section B of the form, refer to the list below to determine whether it is a listed low-risk or high-risk activity.

If an activity is specifically identified as "very low risk" or "high risk" in the list below, indicate this in the "screening result" column in Section B of the form.

#### Very low-risk activities

(Activities with low potential for adverse biophysical or health impacts; including §216.2(c)(2))

Provision of education, technical assistance, or training. (Note that activities directly affecting the environment. do not qualify.)

Community awareness initiatives.

Technical studies and analyses and other information generation activities not involving intrusive sampling of endangered species or critical habitats.

Document or information transfers.

**Small-scale construction.** Construction or repair of facilities if total surface area to be disturbed is under 10,000 sq. ft. (approx. 1,000 sq. m.) (and when no protected or other sensitive environmental areas could be affected).

Capacity for development. Studies or programs intended to develop the capability of recipients to engage in development planning. (Does NOT include activities directly affecting the environment) Small-scale Disaster Risk Management activities such as retrofitting, lo for which the answer to ALL SUPPLEMENTAL SCREENING QUESTIONS is "NO."

#### High-risk activities

(Activities with high potential for adverse biophysical or health impacts; including §216.2(d)(1))

River basin development

New lands development

Planned resettlement of human populations. Penetration road building, or rehabilitation of roads (primary, secondary, some tertiary) over 10 km length, and any roads which may pass through or near relatively undegraded forest lands or other sensitive ecological areas Substantial piped water supply and sewerage construction.

Major bore hole or water point construction. Large-scale irrigation; Water management structures such as dams and impoundments **Drainage of wetlands** or other permanently flooded areas.

Large-scale agricultural mechanization.

Agricultural land leveling.

Procurement or use of <u>restricted use</u> pesticides, or wide-area application in nonemergency conditions under non-supervised conditions. (Consult MEO.)

Light industrial plant production or processing (e.g., sawmill operation, agro-industrial processing of forestry products, tanneries, clothdying operations).

High-risk and typically not funded by USAID:

Actions affecting protected areas and species. Actions determined likely to significantly degrade protected areas, such as introduction of exotic plants or animals.

Actions determined likely to jeopardize threatened & endangered species or adversely modify their habitat (esp. wetlands, tropical forests)

Activities in forests, including:

- Conversion of forest lands to rearing of livestock
- Planned colonization of forest lands
- Procurement or use of timber harvesting equipment
- Commercial extraction of timber
- Construction of dams or other water control structures that flood relatively undegraded forest lands
- Construction, upgrading or maintenance of roads that pass through relatively nondegraded forestlands. (Includes temporary haul roads for logging or other extractive industries)

(This list of activities is taken from the text of 22 CFR 216 and other applicable laws, regulations and directives)

Step 3b: Identifying activities of unknown or moderate risk.

Not all activities identified as "very low risk" or "very high risk" are considered to be of "unknown or moderate risk." Common examples of moderate-risk activities are given in the table below.

Check "moderate or unknown risk" under screening results in Section B of the form for ALL such activities.

Common examples of moderate-risk activities

If ANY of the activities listed in this table may adversely impact (1) protected areas, (2) other sensitive environmental areas, or (3) threatened and endangered species and their habitat, THEY ARE NOT MODERATE RISK. All such activities are HIGH RISK ACTIVITIES.

Small-scale agriculture, NRM, sanitation, etc. (You may wish to define what "small scale" means for each activity)

Agricultural experimentation. Controlled and carefully monitored agricultural experimentation exclusively for the purpose of research and field evaluation of MORE than 4 ha.

**NOTE Biotechnology/GMOs:** No biotechnology testing or release of any kind are to take place within an assisted country until the host countries involved have drafted and approved a regulatory framework governing biotechnology and biosafety.

All USAID-funded interventions, which involve biotechnologies, are to be informed by the ADS 211 series governing "Biosafety Procedures for Genetic Engineering Research". In particular this guidance details the required written approval procedures needed before transferring or releasing GE products to the field.

Medium-scale construction. Construction or rehabilitation of facilities or structures in which the surface area to be disturbed exceeds 10,000 sq. ft (1000 sq meters) but funding level is \$200,000 or less. (E.g. small warehouses, farm-packing sheds, agricultural trading posts, produce market centers, and community training centers.)

**Rural roads.** Construction or rehabilitation of rural roads meeting the following criteria:

- Length of road work is less than ~10 km
- No change in alignment or right of way
- Ecologically sensitive areas are at least 100 m away fr om the road and not affected by construction or changes in drainage.

Sampling. Technical studies and analyses or similar activities that could involve intrusive sampling, of endangered species or critical habitats. (Includes aerial sampling.)

Water provision/storage. Construction or rehabilitation of small-scale water points or water storage devices for domestic or non-domestic use. Water points must be located where no protected or other sensitive environmental areas could be affected.

**NOTE**: USAID guidance on water quality requires testing for arsenic, nitrates, nitrites and coliform bacteria.

Support for intermediate credit institutions when indirect environmental harm conceivably could result.

Institutional support grants to NGOs/PVOs when the activities of the organizations are known and may reasonably have adverse environmental impact.

Pesticides. .Small-scale use of USEPA-registered, least-toxic general-use pesticides. Use must be limited to NGO-supervised use by farmers, demonstration, training and education, or emergency assistance.

**NOTE**: Environmental review (see step 5) must be carried out consistent with USAID Pesticide Procedures as required in Reg. 16 [22 CFR 216.3(b)(1)].

Nutrition, health care or family planning, if (a) some included activities could directly affect the environment (e.g., construction, supply systems, etc.) or (b) biohazardous healthcare

Common examples of moderate-risk activities

#### CAUTION:

If ANY of the activities listed in this table may adversely impact (1) protected areas, (2) other sensitive environmental areas, or (3) threatened and endangered species and their habitat, THEY ARE NOT MODERATE RISK. All such activities are HIGH RISK ACTIVITIES.

No protected areas or relatively undegraded forests are within 5 km of the road.

waste (esp. HIV/AIDS) is produced, syringes are used, or blood is tested.

Title II & III Small-Scale Infrastructure. Food for Development programs under Title II or III, involving small-scale infrastructure with the known potential to cause environmental harm (e.g., roads, bore holes).

Quantity imports of commodities such as fertilizers

#### Step 4. Determine if you must write an Environmental Review Report

Examine the "screening results" as you have entered them in Table I of the form.

- If ALL the activities are "very low risk," then no further review is necessary. In Section C of the form, check the box labeled "very low risk activities." Skip to Step 8 of these instructions.
- If ANY activities are "unknown or moderate risk," you MUST complete an ENVIRONMENTAL REVIEW REPORT addressing these activities. Proceed to Step 5.
- If ANY activities are "high risk," note that USAID's regulations usually require a full iii. environmental assessment study (EA). Because these activities are assumed to have a high probability of causing significant, adverse environmental impacts, they are closely scrutinized. Any proposed high-risk activity should be discussed in advance with USAID. Activity re-design is often indicated.

In some cases, it is possible that reasonable, achievable mitigation and monitoring can reduce or eliminate likely impacts so that a full EA will not be required. If the applicant believes this to be the case, the Environmental Review Report must argue this case clearly and thoroughly. Proceed to Step 5.

#### Step 5. Write the Environmental Review Report, if required

The Environmental Review Report presents the environmental issues associated with the proposed activities. It also documents mitigation and monitoring commitments. Its purpose is to allow the applicant and USAID to evaluate the likely environmental impacts of the project.

For a single, moderate risk activity, the Environmental Review Report is typically a SHORT 4-5 page document. The Report will typically be longer for (1) multiple activities; (2) activities of high or unknown risk; and/or (3) when a number of impacts and mitigation measures are being identified and discussed.

The Environmental Review Report follows the outline below. Alternate outlines are acceptable, as long as all required information is covered.

- A. Summary of Proposal. Very briefly summarize background, rationale and outputs/results expected. (Reference proposal, if appropriate).
- B. Description of Activities. For all moderate and high-risk activities listed in Section B of the ERF, succinctly describe location, siting, surroundings (include a map, even a sketch map). Provide both quantitative and qualitative information about actions needed during all project phases and who will undertake them. (All of this information can be provided in a table). If various alternatives have been considered and rejected because the proposed activity is considered more environmentally sound, explain these.
- C. Site-specific Environmental Situation & Host Country Requirements. Describe the environmental characteristics of the site(s) where the proposed activities will take place. Focus on site characteristics of concern—e.g., water supplies, animal habitat, steep slopes, etc. With regard to these critical characteristics, is the environmental situation at the site degrading, improving, or stable?

NOTE: provide site-specific information in this section, NOT country-level information. General information about country level conditions is already included in the IEE governing the USAID IUWASH Tangguh Program.

- D. Environmental Issues, Mitigation Actions, and Findings. For ALL proposed activities
  - Briefly note the potential environmental impacts or concerns presented by the proposed activities (if any). For guidance, refer to Africa Bureau's Environmental Guidelines for Small-Scale Activities; available at www.encapafrica.org/egssaa.htm.

As per the Small-Scale Guidelines, consider direct, indirect and cumulative impacts across the activity lifecycle (i.e. impacts of site selection, construction, and operation, as well as any problems that might arise with abandoning, restoring or reusing the site at the end of the anticipated life of the facility or activity). Note that "environment" includes air, water, geology, soils, vegetation, wildlife, aquatic resources, historic, archaeological or other cultural resources, people and their communities, land use, traffic, waste disposal, water supply, energy, etc.)

- Assess the extent to which these potential impacts and concerns are significant in the context of the specific activity design and site.
- Set out the mitigation actions to be employed to address these issues.

Mitigation actions are means taken to avoid, reduce or compensate for impacts. Mitigation measures must be reasonable and implementable by field staff. They should be consistent with the good practice guidance provided in Africa Bureau's Environmental Guidelines for Small-Scale Activities; (www.encapafrica.org/egssaa.htm.) Cite this or other guidance used for mitigation design.

- Reach one of three findings regarding the potential impacts:
- a. Significant adverse impacts are very unlikely. Of its nature, the activity in question is very unlikely to result in significant, adverse environmental impacts. Special mitigation or monitoring is not required.

Note: this conclusion is rarely appropriate for high-risk activities.

b. With implementation of the specified mitigation and monitoring, significant adverse impacts are very unlikely.

c. Significant adverse impacts are possible. That is, it is not possible to rule out significant adverse environmental impacts even given reasonable, attainable mitigation and monitoring.

In this case, USAID and the partner will consult regarding next steps. If the activity is to go forward in its current form, additional analysis in the form of an IEE or EA will be required.

Format and structure of this section. Choose a format and structure that presents the necessary information clearly and succinctly.

Table formats can be used. In the example below, the proposed activity was construction of an institutional facility on a 7500m3 plot bisected by a seasonal stream providing drainage to the local area. One potential impact of the activity was reduction of or alteration to the drainage eco-service provided by the seasonal stream.

Issue or cause for concern	Analysis	Finding and conditions/mitigation actions
The seasonal stream running through the plot drains an area of at least 2 km² to the WNW.  Diminution or alteration to this drainage "service" could result in increased upstream pooling & flooding during the rainy season, with associated property damage and increased breeding habitat for disease vectors.	As indicated at left, this impact only arises if the drainage "service " provided by the seasonal stream is diminished or altered in some adverse manner.  So long as compound design maintains the existing service level and construction is managed without disruption to stream flow, actual adverse impact will be negligible or zero.	Per analysis at left, this potential impact is not significant, so long as the following mitigations are implemented:  1. Total stream capacity cannot be diminished by the development of the compound. (Stream channel on average is 3m x 1m.)  2. The stream must remain substantially in the same channel and cannot, e.g., be re-routed around the property.  3. If construction will result in an interruption to stream flow, provision must be made to provide a temporary bypass. Temporary damming of stream flow is not permissible.  4. Post-construction, the stream bed within the property, including point-of-entry (e.g. via culvert under perimeter wall) must be maintained free of obstructions to flow.

E. Environmental Mitigation and Monitoring Plan (EMMP). Set out how compliance with mitigation actions will be monitored/verified. This includes specifying WHO will be responsible for the various mitigation actions, and HOW implementation of the mitigation actions will be tracked/verified.

Also specify how you will report to USAID on the implementation of mitigation actions. (You are REQUIRED to provide your C/AOTR with sufficient information on the status of mitigation implementation for USAID to effectively fulfill its oversight and performance monitoring role.)

Again, choose a format and structure that presents the necessary information clearly and succinctly. EMMPs are typically in table format, and often include a compliance log or "monitoring record" section that records implementation status of the various mitigation actions. The EMMP with current monitoring log can then simply be submitted to the C/AOTR with the quarterly or 6-month project report, satisfying the environmental compliance reporting requirement.

The most basic EMMP format is

Mitigation action	Responsible Party	Monitoring/Verification Method	Monitoring Record (date, result, corrective actions taken, if any)

For additional EMMP formats and examples, see the ENCAP EMMP factsheet, available via www.encapafrica.org/meoEntry.htm

Other Information. Where possible and as appropriate, include photos of the site and surroundings; maps; and list the names of any reference materials or individuals consulted. (Pictures and maps of the site can substantially reduce the written description required in parts B & C)

Step 6. Transcribe findings from the Environmental Review Report to the ERF

For each high-risk or unknown/moderate-risk activity, transcribe your finding from the environmental review report to the last column of Section B of the ERF.

Step 7. Sign certifications (Section C of former.)

Step 8. Submit form to USAID C/AOTR. Be sure to attach the Environmental Review Report, if any.

## **ANNEX 3: ENVIRONMENTAL MITIGATION AND MONITORING REPORT (EMMR)**

### **EMMR PART I OF 4: ENVIRONMENTAL VERIFICATION FORM**

USAID/Indonesia AWARD Name Indonesia Urban Resilient Water, Sanitation, and Hygiene - (USAID IUWASH Tangguh) Project	Date of Screening
Name of Prime Implementing Organization DAI Global LLC	Funding Period for this Award
Name of Sub-Awardee/Contractor (if this EMMR is for a Sub)	Funding Period for this Award
Current FY Resource Levels	Date of Previous EMMR for this Organization
Report Prepared By	Name: Date:

**Key Elements of Program/Activities Implemented** (See Initial Environmental screening of USAID IUWASH Tangguh activities)

### **EMMR PART 2 OF 4: MITIGATION PLAN**

Category of Activity from of DO3 IEE	Describe specific environmental threats of your organization's activities (based on analysis in DO3 IEE)	Description of Mitigation Measures for these activities as required in Section 4 of DO3 IEE	Who is responsible for monitoring	Monitoring Indicator	Monitoring Method	Frequency of Monitoring

### **EMMR PART 3 OF 4: REPORTING FORM**

List each Mitigation Measure from column 3 in the EMMR Mitigation Plan (EMMR Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks

### **EMMR PART 4 OF 4: REPORTING FORM**

List each Mitigation Measure from column 3 in the EMMR Mitigation Plan (EMMR Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks

### ANNEX 4: ENVIRONMENTAL REVIEW FORM (ERF) FOR USAID IUWASH TANGGUH PROJECT SUB-CONTRACTS/SUB-GRANTS

Follow, but do not submit, the attached instructions.

### A. Applicant information

Organization	Parent grant or project	
Individual contact and title	Address, phone & email (if available)	
Proposed subproject	Amount of funding requested	
/subgrant (brief description)	Period of performance	
	Location(s) of proposed activities	

### B. Activities, screening results, and findings

Proposed activities (Provide DESCRIPTIVE listing. Continue on additional page if necessary)	Screening result (Step 3 of instructions)			Findings (Step 6 of instructions. Complete for all moderate/unknown and high-risk activities ONLY)		
	Very Low Risk	High-Risk*	Moderate or unknown risk*	significant adverse impacts are very unlikely	With specified mitigation, significant adverse impacts are very unlikely	Significant Adverse impacts are possible
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						

<sup>\*</sup>These screening results require completion of an Environmental Review Report

#### C. Certification:

I, the undersigned, certify that:

- 1. The information on this form and accompanying environmental review report (if any) is correct and complete.
- 2. Implementation of these activities will not go forward until specific approval is received from the COR.
- 3. All mitigation and monitoring measures specified in the Environmental Review Report will be implemented in their entirety, and that staff charged with this implementation will have the authority, capacity and knowledge for successful implementation.

(Signature)	<u>(</u> Date)
(Print name)	(Title)

Note: if screening results for any activity are "high risk" or "moderate or unknown risk," this form is not complete unless accompanied by an environmental review report.

#### **BELOW THIS LINE FOR USAID USE ONLY**

#### Notes:

1. For clearance to be granted, the activity MUST be within the scope of the activities for which use of the ERF is authorized in the governing IEE. Review IEE before signature. If activities are outside this scope, deny clearance and provide explanation in comments section. The Partner, C/AOTR, MEO and REA must then confer regarding next steps: activity re-design, an IEE or EA. 2. Clearing an ERF containing one or more findings that significant adverse impacts are possible indicates agreement with the analysis and findings. It does NOT authorize activities for which "significant adverse impacts are possible" to go forward. It DOES authorize other activities to go forward. The Partner, C/AOTR, MEO and REA must then confer regarding next steps: activity redesign, an IEE or EA.

#### Clearance record

C/AOR	(print name)	(signature)	(date)
☐Clearance given			
☐Clearance denied			
USAID/Indonesia MEO	(print name)	(signature)	(date)
☐Clearance given			
☐Clearance denied			
Regional Env. Advisor (REA)	(print name)	(signature)	(date)
☐Clearance given			
☐Clearance denied			
Bureau Env. Officer (BEO)*	(print name)	(signature)	(date)
☐Clearance given			
☐Clearance denied			

C/AOR, MEO and REA clearance is required. BEO clearance is required for all "high risk" screening results and for findings of "significant adverse impacts possible. The BEO may review.

Note: if clearance is denied, comments must be provided to applicant (use space below & attach sheets if necessary)

## Note to individuals adapting the \* Supplemental Environmental Review Form for NRM Activities for use on a particular program/activity:

- This supplement is oriented around major resource/issue clusters and asks "leading questions" about the actual potential for unintended harmful impacts, especially of CBNRM/ ecotourism activities.
- Underlined & blue highlighted text MUST be modified to reflect project and mission name
- Questions should be modified to respond to the needs of individual projects. This is intended to be a "living" document subject to adaptation.

# USAID INDONESIA URBAN RESILIENT WATER, SANITATION, AND HYGIENE (IUWASH TANGGUH)

Mayapada Tower I, 10<sup>th</sup> FI Jl. Jend. Sudirman Kav. 28 Jakarta 12920 Indonesia

Tel. +62-21 522 - 0540





