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USAID IUWASH Tangguh

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

PROJECT YEAR 2 WORK PLAN

SEPTEMBER 20, 2022

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ACRONYMS

4Ks	<i>Kuantitas, Kualitas, Kontinuitas, dan Keterjangkauan/Quantity, Quality, Continuity, and Affordability</i>
Akatirta	<i>Akademi Tirta Wiyata/Tirta Wiyata Environmental Engineering Academy</i>
AKOPSI	<i>Asosiasi Kabupaten/Kota Peduli Sanitasi/Alliance for Districts and Cities Having Concerns on Sanitation</i>
AMBK	<i>Air Minum Berbasis Kinerja/Performance Based Grant (PBG)</i>
AMEL	<i>Activity Monitoring, Evaluation, and Learning</i>
AMELP	<i>Activity Monitoring, Evaluation, and Learning Plan</i>
AMEP	<i>Activity, Monitoring, and Evaluation Plan</i>
AP Scheme	<i>Availability Payment Scheme</i>
APBD	<i>Anggaran Pendapatan dan Belanja Daerah/Local Government Budget</i>
APBN	<i>Anggaran Pendapatan dan Belanja Negara/National Government Budget</i>
APEKSI	<i>Asosiasi Pemerintah Kota Seluruh Indonesia/Association of Indonesian City Governments</i>
APIK	<i>USAID Indonesia Climate Change Adaptation and Resilience Project</i>
APKASI	<i>Asosiasi Pemerintah Kabupaten Seluruh Indonesia/Association of Indonesian District Governments</i>
APR	<i>Annual Progress Reports</i>
AWP	<i>Annual Work Plan</i>
Bappeda	<i>Badan Perencanaan dan Pembangunan Daerah/Regional Development Planning Agency</i>
Bappenas	<i>Badan Perencanaan dan Pembangunan Nasional/National Development Planning Agency</i>
B2B	<i>Business to Business</i>
BEP	<i>Break-Even Point</i>
BKF	<i>Badan Kebijakan Fiskal/Fiscal Policy Agency</i>
BJP	<i>Bukan Jaringan Perpipaan/Non-Pipe Network</i>
BLUD	<i>Badan Layanan Umum Daerah/Regional Public Service Agency</i>
BMKG	<i>Badan Meteorologi, Klimatologi, dan Geofisika/ Meteorology, Climatology, and Geophysical Agency</i>
BPDAS HL	<i>Balai Pengelolaan Daerah Aliran Sungai dan Hutan Lindung/Watershed and Protected Forest Management Office</i>
BPDLH	<i>Badan Pengelolaan Dana Lingkungan Hidup/Environmental Fund Management Agency</i>
BTAM	<i>Balai Teknologi Air Minum/Agency for Water Technology</i>
BTS	<i>Balai Teknik Sanitasi/Sanitation Technical Center</i>
BUMD	<i>Badan Usaha Milik Daerah/Regional-owned Enterprises</i>
BUMDes	<i>Badan Usaha Milik Desa/Village-owned Enterprises</i>
CB	<i>Capacity Building</i>

CCVA	Climate Change Vulnerability Assessment
CDCS	Country Development and Cooperation Strategy
CEM	Citizen Engagement Mechanism
CFR	Code of Federal Regulations
CJRO	Central Java Regional Office
CLA	Collaboration, Learning, and Adapting
COP	Chief of Party
CPMU	Central Project Management Unit
CR	Climate Resilience
CSO	Civil Society Organization
CSR	Corporate Social Responsibility
CSV	Creating Shared Value
CVA	Climate Vulnerability Assessment
CWIS	Climate and Weather Information System. This acronym might also be use for City Wide Inclusive Sanitation
DAK	<i>Dana Alokasi Khusus/Special Allocation Budget</i>
DCOP	Deputy Chief of Party
DFAT	Australian Department of Foreign Affairs and Trade
DGHS	Directorate General of Human Settlements
Dit. AM	<i>Direktorat Air Minum/ Directorate of Drinking Water</i>
Dirjen	<i>Direktur Jenderal/Director General</i>
DO	Development Objective
DED	Detailed Engineering Design
DPA	<i>Dokumen Pelaksanaan Anggaran/Budget Implementation Document</i>
DPD	<i>Dewan Pimpinan Daerah/Regional Executive Board</i>
EJRO	East Java Regional Office
EQs	Evaluation Questions
EE	Energy Efficiency
ESDM	<i>Energi dan Sumber Daya Mineral/Energy and Mineral Resources</i>
FAS	Field Accounting System
FCR	Full Cost Recovery
FGD	Focus Group Discussion
FOM	Field Operation Manual
FORKALIM	<i>Asosiasi Pengelola Air Limbah Domestik/Association of Domestic Wastewater Operators</i>
FS	Feasibility Study
GAP	Gender Analysis Pathway
GESI	Gender Equality and Social Inclusion
GIA	Grant Implementation Agreement
GIS/MIS	Geographical Information System/Management Information System

GCF	Green Climate Fund
Godex	Governance Index
GOI	Government of Indonesia
GRBP	Gender Responsive Budgeting and Planning
HAMP	<i>Hibah Air Minum Perkotaan/Urban Drinking Water Grant</i>
HC	House Connection
HH	Household
HL	High Level
HO	Home Office
HR	Human Resources
HWWS	Handwashing With Soap
IEC	Information, Education, and Communication
IEE	Initial Environmental Examination
IPLT	<i>Instalasi Pengolahan Lumpur Tinja/Septage Treatment Plant (STP)</i>
IR	Immediate Result
IRIS	Integrated Resilient IUWASH Systems
IRR	Internal Rate of Return
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 Tangguh
JP	<i>Jaringan Perpipaan/Pipe Network</i>
JSS	Jakarta Sewerage System
Kasubdit Wil 3.	<i>Kepala Sub-Direktorat Wilayah 3/Head of Sub-Directorate of Region 3</i>
Kemendagri	<i>Kementerian Dalam Negeri/Ministry of Home Affairs</i>
Kemendes PDDT	<i>Kementerian Desa, Pembangunan Daerah Tertinggal dan Transmigrasi/Ministry of Village, Development of Disadvantaged Regions, and Transmigration</i>
Kemenkes	<i>Kementerian Kesehatan/Ministry of Health</i>
KIAT	<i>Kemitraan Indonesia Australia untuk Infrastruktur/Indonesia Australia Partnership for Infrastructure</i>
KLHK	Ministry of Environment and Forestry
Kominfo	Ministry of Communication and Information Technology
KPI	Key Performance Indicators
KSN	Kawasan Strategis Nasional/National Strategic Area
LG	Local Government
LOA	Life of Activity
LOP	Life of Project
LLTT /L2T2	<i>Layanan Lumpur Tinja Terjadwal/Regular Desludging Service</i>
LPS	Liter Per Second

LTTA	Long-Term Technical Assistance
M&E/Monev	Monitoring and Evaluation
MABR	Ministry of Administrative and Bureaucratic Reform
MAMMINASATA	Makassar, Maros, Gowa, and Takalar
MBR	<i>Masyarakat Berpenghasilan Rendah</i> /Low Income Communities
MCIT	Ministry of Communication and Information Technology
MEBIDANG	Medan, Binjai, and Deli Serdang
MEL	Monitoring, Evaluation & Learning
MFI	Microfinance Institution
MOEF	ministry of Environment and Forestry
MOF	Ministry of Finance
MOH	Ministry of Health
MOHA	Ministry of Home Affairs
MPWH/MoPWH	Ministry of Public Works and Housing
<i>Musrenbang</i>	Musyawarah Perencanaan Pembangunan/Development Planning Meeting
MWECP	Ministry of Women Empowerment and Child Protection
NC	National Coordinator
NGO	Non-Governmental Organization
NORC	National Opinion Research Center
NPV	Net Present Value
NRW	Non-revenue Water
NSRO	North Sumatra Regional Office
NTT	Nusa Tenggara Timur/East Nusa Tenggara
NDWC	Negative Determination Without Condition
NUWSP	World Bank National Urban Water Supply Project
OPD	<i>Organisasi Perangkat Daerah</i> /Local Government Working Unit
PDAM/Perumda	<i>Perusahaan Daerah Air Minum</i> /Municipal Drinking Water Company
PBG	Performance Based Grant
Perda	Peraturan Daerah/Regional Regulation
Permendagri	<i>Peraturan Menteri Dalam Negeri</i> /Regulation of the Minister of Home Affairs
Permen PU	<i>Peraturan Menteri Pekerjaan Umum</i> /Regulation of Minister of Public Works
PERPAMSI	National Association Of Water Utilities
PES	Payment for Environmental Services
PIF	Partnership and Innovation Fund
PKK	<i>Pemberdayaan Kesejahteraan Keluarga</i> /Family Welfare Empowerment
PO	Purchase Order
Pokja AMPL/PPAS	<i>Kelompok Kerja Air Minum dan Penyehatan Lingkungan</i> /Perumahan, Permukiman, Air Minum, dan Sanitasi /Working Group for Water and

	Sanitation/Working Group for Housing, Settlement, Water, and Sanitation
PPK	<i>Pola Pengelolaan Keuangan/Financial Management Pattern</i>
PPP	Public Private Partnership
PSA	Public Service Announcement
PSDA	<i>Pengelolaan Sumber Daya Air/Water Resource Management</i>
PSE	Private Sector Engagement
PT. SMI	PT. Sarana Multi Infrastruktur
PUPR	<i>Pekerjaan Umum dan Perumahan Rakyat/Public Works and Housing</i>
PWS	Program Work Statement
PY1, PY2, PY3	Project Year 1, Project Year 2, Project Year 3
Q1,4	Quarter 1,4
QPR	Quarterly Progress Reports
RDS	Real Demand Survey
RKAP	<i>Rencana Kerja dan Anggaran Perusahaan/Company Work Plan and Budget</i>
RKT	<i>Rencana Kerja Tahunan/Annual Work Plan</i>
RPAM	<i>Rencana Pengamanan Air Minum/Water Safety Plan</i>
RPJMN	<i>Rencana Pembangunan Jangka Menengah Nasional/National Medium Term Development Plan</i>
RPJMD	<i>Rencana Pembangunan Jangka Menengah Daerah/Regional Medium Term Development Plan</i>
Sandex	Sanitation Index
SBC	Social and Behavior Change
SBCC	Social and Behavior Change Communication
SBOT	Supported Build, Operate, and Transfer
SDG	Sustainable Development Goal
Sekda	<i>Sekretaris Daerah/Regional Secretary</i>
SEKNAS	<i>Sekretariat Nasional/National Secretary</i>
SIPA	<i>Surat Izin Pengambilan Air/Water Withdrawal Permits</i>
SILPA	<i>Sisa Lebih Perhitungan Anggaran/Budget Surplus</i>
SIMAVI	<i>Steun in Medische Aangelegenheden Voor Inheemsen/Medical Aid for Indigenous Affairs (a Netherlands Development Organization)</i>
SK	<i>Surat Keputusan/Decree</i>
SKPD	<i>Satuan Kerja Perangkat Daerah/Local Government Working Unit</i>
SMDW	Safely Managed Drinking Water
SNV	<i>Stichting Nederlandse Vrijwilligers/Netherlands Development Organization</i>
SOP	Standard Operating Procedure
STBM	<i>Sanitasi Total Berbasis Masyarakat/Community-Based Total Sanitation</i>
SOW	Scope of Work
SPAM	<i>Sistem Penyediaan Air Minum/Water Supply System</i>

SPALDS	<i>Sistem Pengelolaan Air Limbah Domestik Setempat/Onsite Domestic Wastewater Management System</i>
SPALDT	<i>Sistem Pengelolaan Air Limbah Domestik Terpusat/Offsite Domestic Wastewater Management System</i>
SPM	<i>Standar Pelayanan Minimum/Minimum Service Standards</i>
SSRO	South Sulawesi Regional Office
SSEI	South Sulawesi and Eastern Indonesia
STTA	Short-Term Technical Assistance
SUPD II	<i>Sinkronisasi Urusan Pemerintahan Daerah II/Local Government Affairs Synchronization II</i>
TAMIS	Technical and Administrative Management Information System
TNA	Training Needs Assessment
TOCO	Tak Order Contracting Officer
TOCOR	Task Order Contracting Officer's Representative
TOT	Training of Trainers
TPB	<i>Tujuan Pembangunan Berkelanjutan/ Sustainable Development Goal</i>
TTS	Timor Tengah Selatan
UNICEF	United Nations International Children's Emergency Fund
UPT	<i>Unit Pelaksana Teknis/Technical Implementing Unit</i>
UPTD	<i>Unit Pelaksana Teknis Daerah/Regional Technical Implementing Unit</i>
US	United States
USG	United States Government
USAID	United States Agency for International Development
USAID ERAT	USAID Tata Kelola Pemerintahan yang Efektif, Efisien, dan Kuat (a USAID project to improve the effectiveness and efficiency of government-provided services)
USAID SEGAR	<i>USAID Sustainable Environmental Governance Across Regions</i>
UWASSH	Urban, Water, Sanitation, Solid Waste, and Hygiene
VA	Vulnerability Assessment
VAAP	Vulnerability Assessment-Action Planning
VAT	Value Added Tax
VGf	Viability Gap Fund
WASH	Water, Sanitation, and Hygiene
WJDB	West Java, DKI Jakarta, Banten
WOSOSUKA	Wonogiri, Sukoharjo, Surakarta, and Karanganyar
WQQ	Water Quality and Quantity
WRM	Water Resource Management
WVI	Wahana Visi Indonesia
Yayasan KEHATI	Yayasan Keanekaragaman Hayati

YPCII	<i>Yayasan Pembangunan Citra Insan Indonesia</i> /a non-profit organization aiming at advancing people's lives in health, education, economy and the environment
ZAMP	<i>Zona Air Minum Prima</i> /Prime Drinking Water Service Zone

EXECUTIVE SUMMARY

In accordance with Section F.5.6 of Task Order Number 72049722N00001, the following document serves as the second Annual Work Plan (AWP) of the USAID Indonesia Urban Resilient Water, Sanitation, and Hygiene (IUWASH Tangguh) project. This AWP covers the period of October 01, 2022 through September 30, 2023, which is referred to as Project Year 2 (PY2).

USAID Indonesia Urban Resilient Water, Sanitation, and Hygiene (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).

Objective Overview

Below we provide brief highlights of the PY2 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. In Year 2, we will achieve US\$2 million against this target, by further helping local governments and WASH institutions to build-out a pipeline of investable

RINGKASAN EKSEKUTI

Sesuai dengan Section F.5.6 Task Order No. 72049722N00001, dokumen berikut merupakan Rencana Kerja Tahunan (AWP) kedua proyek USAID Indonesia Urban Resilient Water, Sanitation, and Hygiene (IUWASH Tangguh). AWP ini mencakup periode 01 Oktober 2022 hingga 30 September 2023, yang disebut sebagai Tahun Kedua Pelaksanaan Proyek (PY2).

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 hygiene (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)

Ikhtisar Tujuan

Di bawah ini kami memberikan sorotan singkat kegiatan PY2 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. Di tahun kedua, kami akan mencapai US\$2 juta untuk target ini dengan cara membantu pemerintah daerah dan institusi air minum dan

projects and potential funding sources (we specify some specific opportunities in Section 3.1, below). 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 PY2, the team will also continue to build on its regulatory and policy reform initiatives, having identified specific opportunities to improve WASH governance in Year 1. In collaboration with other objectives, the team will finalize revisions to the key indices and begin measuring baselines across the Godex, Sandex, and PDAM Index, which will serve as an important basis for developing a customized suite of capacity development interventions based on individual institutional needs.

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

In Year 1, the team invested efforts to fully articulate the implications of shifting from a focus on improved access (*Air Layak*) under previous programs, to safely managed drinking water (*Air Aman*) under USAID IUWASH Tangguh. The team will focus on efforts to increase new connections that qualify as safely managed drinking water. In addition, the team will support the improvement of service performance on existing connections to safely managed drinking water. Both efforts will be carried out through several approaches including climate-resilient drinking water, improving water utilities capacity, improving service capacity, and securing water in customers unit. In Year 2, the Water Supply Lead will continue its collaborations 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

sanitasi untuk menyusun daftar proyek yang dapat diinvestasikan dan sumber pendanaan potensial (kami menjelaskan beberapa peluang khusus di bagian 3.1 di bawah). Secara bersamaan, tim akan meningkatkan kemampuan institusi air minum dan sanitasi di daerah untuk mengembangkan analisis keuangan historis, mengidentifikasi peluang pendanaan melalui pelacakan data anggaran tahunan pemda (APBD), dan terus melakukan monitoring keuangan.

Di PY2, tim juga akan terus membangun inisiatif reformasi peraturan dan kebijakan, setelah mengidentifikasi peluang khusus untuk meningkatkan tata kelola WASH di tahun pertama. Bekerja sama dengan tujuan lain, tim akan melakukan finalisasi revisi indeks kunci dan mulai mengukur baseline Godex, Sandex, dan Indeks PDAM, yang akan menjadi dasar penting untuk mengembangkan intervensi peningkatan kapasitas sesuai dengan kebutuhan setiap institusi.

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

Di tahun pertama, tim melakukan upaya untuk menjelaskan secara utuh dampak peralihan fokus dari air layak yang ada di program sebelumnya ke air aman di bawah USAID IUWASH Tangguh. Tim akan fokus pada upaya peningkatan sambungan baru yang memenuhi syarat sebagai air minum aman. Di samping itu, tim akan mendukung peningkatan kinerja layanan pada sambungan yang sudah ada menjadi air minum aman. Kedua upaya tersebut akan dilakukan melalui pendekatan air minum berketahanan iklim, peningkatan kapasitas pengelola, peningkatan kapasitas layanan, dan pengamanan air di unit pelanggan. Di tahun kedua, *Lead Water Supply* akan terus bekerja sama dengan Kementerian PUPR, PERPAMSI, dan Direktorat Air Minum Kementerian PUPR untuk menyiapkan rencana kegiatan lima tahun yang disesuaikan dengan program Pemerintah Indonesia dan mendorong kesepakatan lokasi PDAM, ZAMP, dan RPAM, termasuk rencana alokasi anggaran

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 finalize updates to PDAM index tools as the basis for monitoring systems utilizing the mWater platform. For long-term sustainability, USAID IUWASH Tangguh will initiate work for its workforce development program linking to the PDAM/BUMD Capacity Building Roadmap and will provide training to over 500 WASH workers together with Objective 2b.

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

Under Objective 2b, focused on climate resilient safely managed sanitation services, the team will continue to focus on promoting desludging, house connections for off-site sanitation as well as looking for opportunities to support minimum standards for LLTT. In Year 2, the team will explore opportunities to strengthen FORKALIM potentially by revisiting its relationship to PERPAMSI with a view to sustainability. The team will utilize information collected from the baseline of the Sanitation Index to inform customized interventions across the 31 locations with existing IPLT operators and the seven areas with no operator. As a result of these efforts, in Year 2, the team will help bring improved desludging services to three cities/districts.

Objective 3 – Improved Water Resources Management to Support Resilient Drinking Water Services

Under Objective 3, USAID IUWASH Tangguh began to clarify approaches to improve water resources management to support resilient

dan potensi bentuk kerja sama. Bekerja sama dengan koordinator nasional untuk tata kelola dan *lead WASH finance*, tim *Water Supply* akan melakukan finalisasi pembaruan alat indeks PDAM sebagai dasar sistem pemantauan menggunakan mWater. Untuk keberlanjutan jangka panjang, USAID IUWASH Tangguh akan mulai pekerjaan untuk program pengembangan tenaga kerja yang dikaitkan dengan Peta Jalan Peningkatan Kapasitas PDAM/BUMD dan akan memberikan pelatihan kepada lebih dari 500 pekerja sektor WASH Bersama Tujuan 2b

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

Di bawah Tujuan 2b yang berfokus pada layanan sanitasi aman berketangguhan iklim, tim akan terus fokus mempromosikan penyedotan lumpur tinja, sambungan rumah ke sistem pengelolaan air limbah domestik terpusat serta mencari peluang untuk mendukung standar pelayanan minimal untuk LLTT. Di tahun kedua, tim akan menajaki peluang untuk menguatkan FORKALIM kemungkinannya dengan meninjau kembali hubungannya dengan PERPAMSI untuk mencapai keberlanjutan. Tim akan menggunakan informasi yang dikumpulkan dari baseline Indeks Sanitasi untuk memberikan informasi tentang intervensi yang disesuaikan di 31 lokasi yang telah mempunyai operator IPLT dan tujuh area yang belum mempunyai operator. Sebagai hasil dari upaya ini, di tahun kedua, tim akan membantu peningkatan layanan lumpur tinja untuk tiga kota/kabupaten.

Tujuan 3 – Peningkatan Pengelolaan Sumber Daya Air untuk Mendukung Ketangguhan Layanan Air Minum

Di bawah Tujuan 3, USAID IUWASH Tangguh mulai mengklarifikasi pendekatan untuk meningkatkan pengelolaan sumber daya air untuk

drinking water sources in Year 1. In Year 2, the team will finalize an approach to conducting Climate Change Vulnerability Assessments (CCVAs) to inform improved water management at the basin/catchment level, while also providing high resolution analysis for the most critical source points (including springs, aquifers, and surface water) for partner PDAM to identify opportunities to improve the resiliency of those sources. In Year 2, the team will help develop five CCVAs which will serve as the basis for outreach and awareness raising activities and identifying opportunities for investment.

In Year 1, the Objective 4 team, focused on improving women's participation and leadership in improved WASH and WRM and increased adoption of positive behaviors, began to expand successful approaches from USAID IUWASH PLUS and adopt them to new target audiences and intended outcomes as detailed in the Project's SBC Strategy. During Y2, the team will continue to work with MOH and other partners to develop strategic messages to reach over 50,000 people to support increased demand for services under Objective 2 and raising awareness of the importance of water resources management for climate change resilience.

Objective 4 – Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements in WASH and WRM

The Objective 4 in collaboration with Objective 1, Objective 2 (water and sanitation), and Objective 3 will start the process of hotspot selection by conducting rapid assessment and mapping of access to safely managed sanitation (for WASH focus location) and following the delineation process to understand the specific

mendukung sumber air minum yang tangguh di tahun pertama. Di tahun kedua, tim akan melakukan finalisasi pendekatan untuk melakukan Kajian Kerentanan Perubahan Iklim (*Climate Change Vulnerability Assessments/CCVA*) untuk memberikan informasi tentang pengelolaan air yang lebih baik di daerah tangkapan air, sekaligus menyediakan analisis beresolusi tinggi untuk titik-titik sumber yang paling kritis (termasuk mata air, akuifer, dan air permukaan) kepada PDAM mitra untuk mengidentifikasi peluang untuk meningkatkan ketangguhan sumber tersebut. Di tahun kedua, tim akan membantu pengembangan lima CCVA yang akan menjadi dasar bagi kegiatan penjangkauan dan peningkatan kesadaran, serta mengidentifikasi peluang investasi.

Di tahun pertama, tim Tujuan 4 fokus pada peningkatan partisipasi dan kepemimpinan perempuan dalam peningkatan WASH dan PSDA serta meningkatkan adopsi perilaku positif, mulai mengembangkan pendekatan yang berhasil dari USAID IUWASH PLUS serta mengadopsinya untuk target audiens yang baru dan capaian yang diharapkan seperti yang dijelaskan dalam strategi SBC proyek. Selama PY2, tim akan terus bermitra dengan Kemenkes dan mitra lain untuk mengembangkan pesan strategis untuk menjangkau lebih dari 50.000 orang yang mendukung peningkatan permintaan terhadap layanan di bawah *Objective 2*, dan meningkatkan kesadaran pentingnya pengelolaan sumber daya air untuk ketangguhan perubahan iklim.

Tujuan 4 – Peningkatan Adopsi Perilaku dan Partisipasi dan Kepemimpinan Perempuan yang Berkontribusi dalam Peningkatan WASH dan PSDA

Team Tujuan 4 berkolaborasi dengan Tujuan 1, Tujuan 2 (water and sanitation), and Tujuan 3 akan memulai proses penentuan lokasi hotspot dengan melakukan pengkajian cepat dan pemetaan potensi peningkatan akses air minum dan sanitasi aman (untuk lokasi fokus WASH dan mengikuti proses deliniasi untuk memahami

community that will contribute to WRM condition. The hotspot selection will be followed by community engagement to support BC activities.

USAID IUWASH Tangguh will conduct a baseline survey for handwashing with soap to understand existing (percentage) households with soap and water at a handwashing station on premises.

masyarakat yang berkontribusi pada kondisi PSDA. Penentuan lokasi hotspot akan diikuti dengan pelibatan masyarakat untuk mendukung kegiatan BC.

USAID IUWASH Tangguh akan melakukan survei kondisi awal Cuci Tangan Pakai Sabun untuk memahami kondisi awal (persentase) rumah tangga dengan sabun dan air pada sarana cuci tangan pakai sabun di rumah.

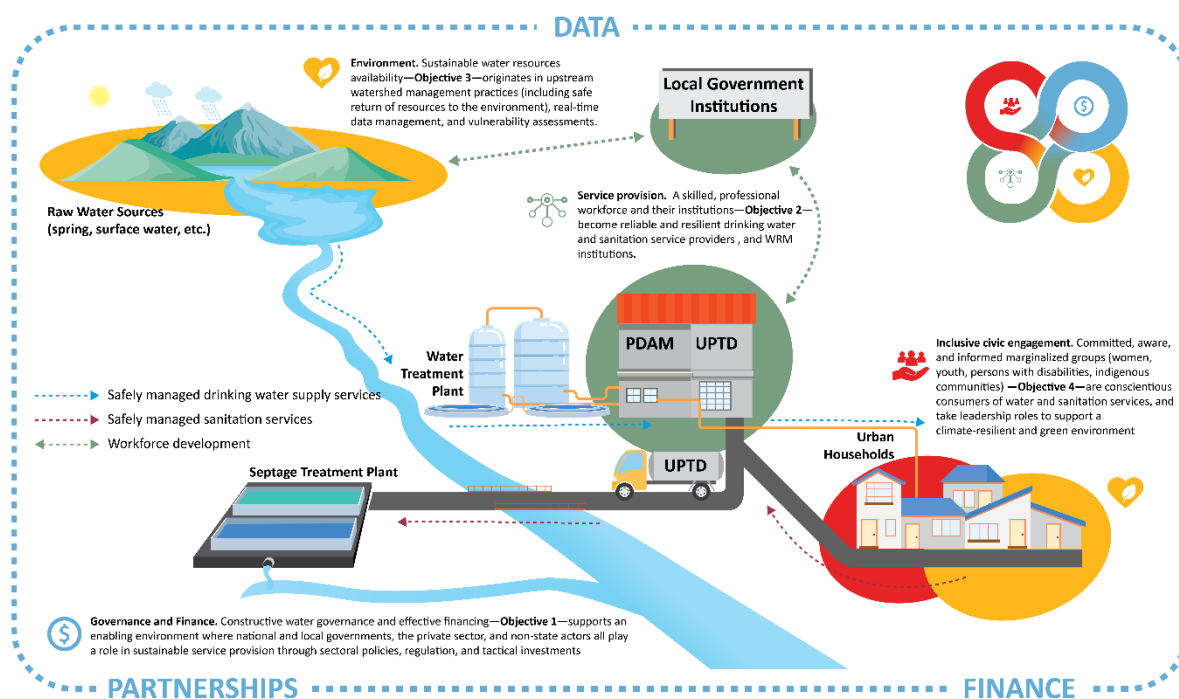
I. INTRODUCTION

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 1. Key Features of the IRIS Approach



I.1. PURPOSE

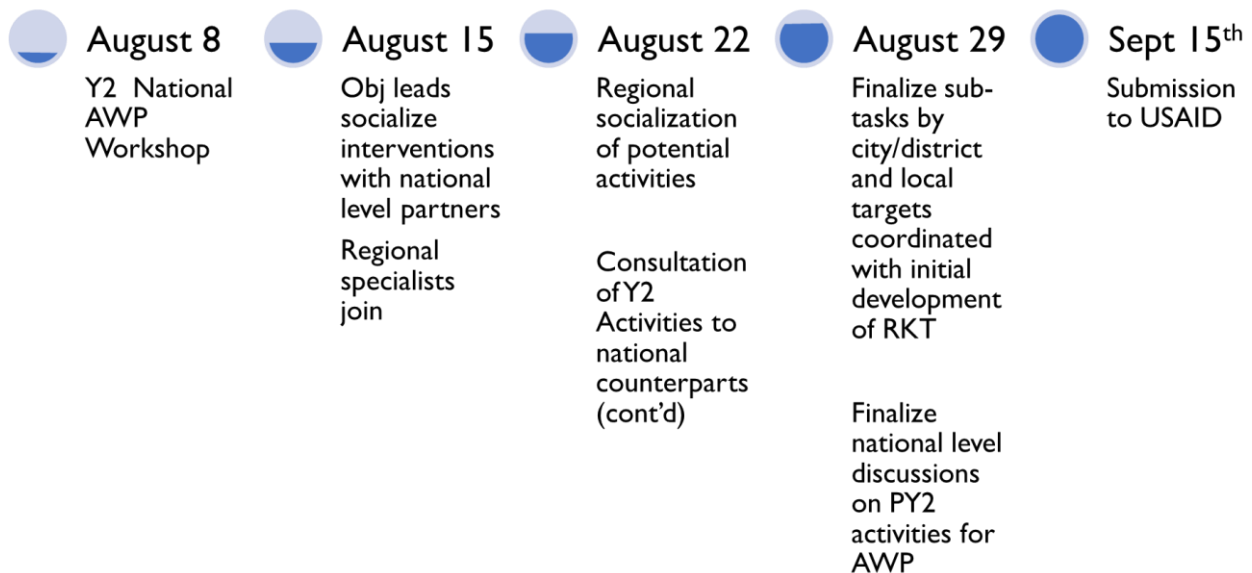
The Annual Work Plan, referenced in section F.5.6 of the contract, guides the USAID IUWASH Tangguh team through implementation with activity level detail linked to the Project Performance Work Statement (PWS) (Section C of the contract). This work plan covers Program Year 2 (PY2), specifically the period from October 1, 2022, through September 30, 2023.

I.2. ANNUAL WORK PLAN DEVELOPMENT PROCESS

The USAID IUWASH Tangguh team prepared the PY2 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 almost all technical and operations staff. Regional and satellite offices are in the process of being opened and all program work sites have been mutually agreed upon between Bappenas, partner ministries, and local governments themselves. Parallel to the development of this work plan, regional teams are in the process of developing site specific *Rencana Kerja Tahunan* (RKTs) that will serve as the basis for cooperation between local governments (cities and districts) and USAID IUWASH Tangguh. Therefore, the activities identified in this work plan will be further elaborated and customized based on the unique needs of individual local partners.

Exhibit 2. Key Work Plan Development Dates



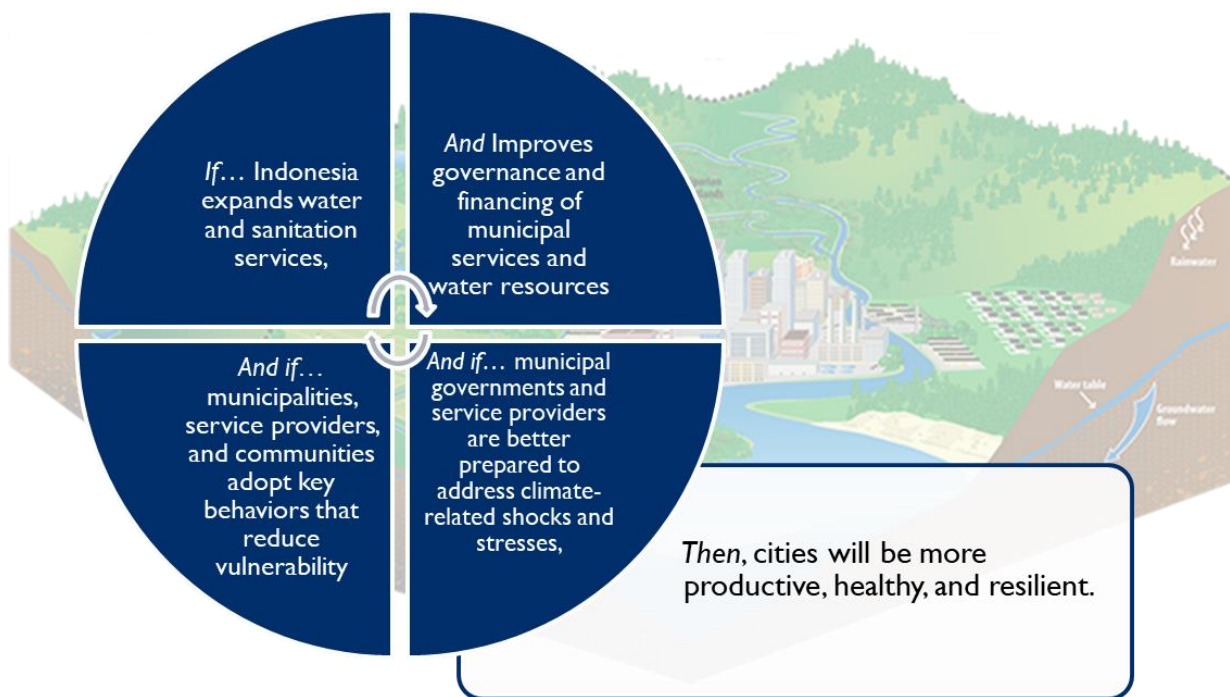
I.3. APPROACH TO ACHIEVING USAID IUWASH TANGGUH RESULTS

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 1), presentation of the Year 2 work plan, and project results framework linking to the USAID Indonesia 2020–2025 CDCS.

I.4. THEORY OF CHANGE

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

Exhibit 3. USAID IUWASH Tangguh Theory of Change



I.5. WORK PLAN ORGANIZATION

Section 1: Introduction

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 high-level 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 1,

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: Regional Technical Activities – In this section, we present a narrative of the specific activities the team will carry out in the regions, along with associated timelines and milestones. This section is intended to present greater detail building off Section 3, and not in addition to it.

Section 5: 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.

ANNEX 1: Detailed PY2 Targets and the Life of Activity Targets by Region

ANNEX 2: Regional Targets towards AMEP Results

ANNEX 3: Organizational Structure and Matrix Management Chart

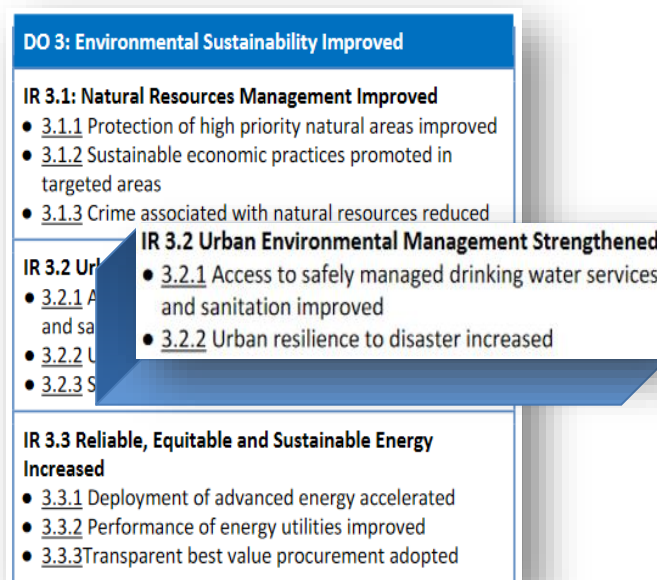
2. PROGRAM RESULTS FRAMEWORK

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 4 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 alignment with its country development trajectory initiatives, with a particular focus on:

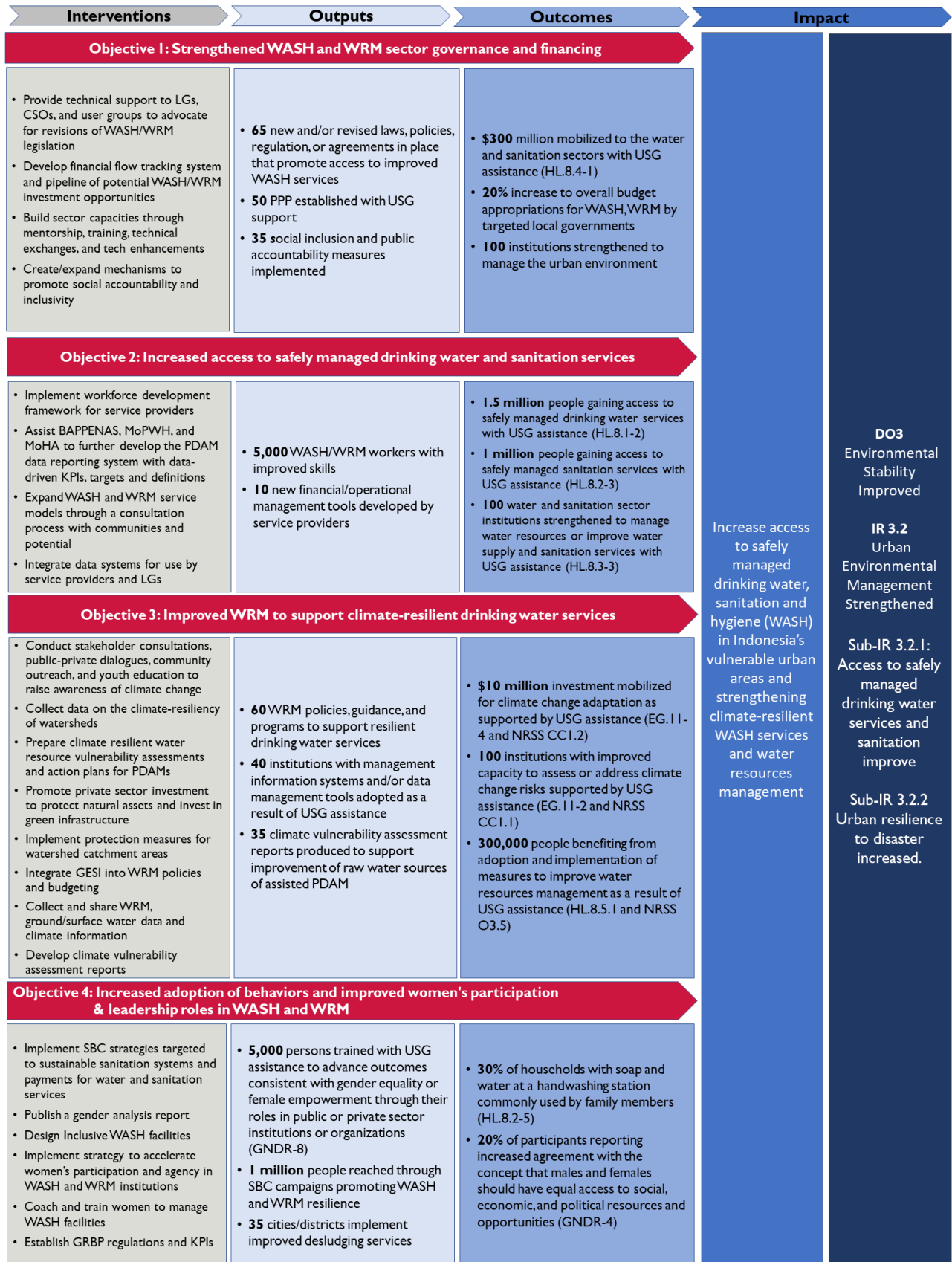
- **Redefining the Relationship** – GOI partners will be out front on USAID IUWASH Tangguh. At the national level Bappenas has already taken a lead role in providing strategic coordination to USAID IUWASH Tangguh through start-up support for site selection and providing feedback on the overall direction 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 4. 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 through 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.

Exhibit 5. USAID IUWASH Tangguh Results Framework



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 sub-tasks activities. The exhibit below provides a summary of the USAID IUWASH Tangguh task and subtasks that contribute to the indicators.

Exhibit 6. USAID IUWASH Tangguh Indicators and Target

Result No.	Indicator	Type	Life of Activity (LOA) Target	PY1 Achievement	PY2 Target
Objective 1: Strengthened WASH and WRM Sector Governance and Financing					
IT 1-1	[Custom] Number of new and/or revised laws, policies, regulations, or agreements in place that promote access to improved WASH services	Output	65	0	5
IT 1-2	[Custom] Number of public-private partnerships established with USAID support	Output	50	0	2
IT 1-3	[Custom] Number of social inclusion and public accountability measures implemented by supported institutions	Output	35	0	5
IT 1-4	[HL.8.4-1] Value of new funding mobilized to the water and sanitation sectors as a result of USG assistance	Outcome	\$300 Million	0	\$2 Million
IT 1-5	[Custom] Change in overall budget appropriations for WASH and WRM by targeted local governments	Outcome	+20%	0	0%
IT 1-6	[Custom] Number of institutions strengthened to manage the urban environment	Outcome	100	0	0
Objective 2: Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services					
IT 2-1	[Custom] Number of WASH and WRM workers' skills and competencies improved as a result of USG assistance	Output	5,000	0	500
IT 2-2	[Custom] Number of new financial/operational and management tools developed by service providers as a result of USG assistance	Output	10	0	1
IT 2-3	[HL.8.1-2] Number of people gaining access to a safely managed drinking water services as a result of USG assistance	Outcome	1,500,000	0	0
IT 2-4	[HL.8.1-3] Number of people receiving improved service quality from an existing basic or safely managed drinking water service as a result of USG assistance	Outcome	TBD	0	TBD
IT 2-5	[HL.8.2-3] Number of people gaining access to safely managed sanitation services as a result of USG assistance.	Outcome	1,000,000	0	0

Exhibit 6. USAID IUWASH Tangguh Indicators and Target

Result No.	Indicator	Type	Life of Activity (LOA) Target	PY1 Achievement	PY2 Target
IT 2-6	[Custom] Number of cities/districts implementing improved desludging services	Output	35	0	3
IT 2-7	[HL.8.3-3] 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	Outcome	100	0	0
Objective 3: Improved Water Resources Management to Support Resilient Drinking Water Services					
IT 3-1	[Custom] Number of WRM policies, guidance, and programs to support resilient drinking water services	Output	60	0	5
IT 3-2	[Custom] Number of institutions with management information systems and/or data management tools adopted as a result of USG assistance	Output	40	0	2
IT 3-3	[Custom] Number of climate vulnerability assessment reports produced to support improvement of raw water sources of assisted PDAM	Output	35	0	5
IT 3-4	[EG.11-4] Amount of investment mobilized for climate change adaptation as supported by USG assistance	Outcome	\$10 Million	0	\$ 0
IT 3-5	[EG.11-2] Number of institutions with improved capacity to assess/address climate change risks supported by USG assistance	Outcome	100	0	10
IT 3-6	[HL8.5-1] Number of people benefiting from adoption and implementation of measures to improve water resources management as a result of USG assistance	Outcome	300,000	0	0
Objective 4: Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles That Contribute to Improvements in WASH and WRM					
IT 4-1	[Custom] Number of people reached through SBC campaigns promoting WASH and WRM resilience	Output	1,000,000	0	50,000
IT 4-2	[GNDR-8] 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	Output	5,000	0	250
IT 4-3	[HL.8.2-5] Percentage of households with soap and water at a handwashing station on premises	Outcome	+30%	0	0

Exhibit 6. USAID IUWASH Tangguh Indicators and Target

Result No.	Indicator	Type	Life of Activity (LOA) Target	PY1 Achievement	PY2 Target
IT 4-4	[GNDR-4] Percentage of participants reporting increased agreement with the concept that males and females should have equal access to social, economic, and political resources and opportunities	Outcome	20%	0	1%

2.2. MONITORING, EVALUATION, LEARNING PLAN AND ACTIVITY

USAID IUWASH Tangguh MEL Program for PY2 will focus on supporting strong integration between performance indicators and all objective key activities at the national and regional level. This process will start with developing a data monitoring system for each outcome and output so it can be a useful guidance to track key activities under tasks in all objectives.

After gaining approval from USAID Indonesia on Activity Monitoring, Evaluation and Learning Plan (AMELP), the MEL team started conducting internal discussions with the national and the regional team on disseminating the document to all objective specialists. This is an important step to provide deep understanding about the indicator’s detailed reference sheets and on how to use monitoring tools for monitoring, evaluation, and learning. To ensure staff understanding on AMELP increases, a pre-test and a post-test were carried out in SSRO, resulting in a significant average increase from 39% to 88%. AMELP dissemination is targeted to be completed in early PY2.

The Solstice Institute will continue providing support to USAID IUWASH Tangguh in developing work plan of mWater utilization during PY2. This will include developing MIS (Management Information System) of USAID IUWASH Tangguh performance indicators and conducting training for internal staff at national and regional on integrating mWater into data collection, monitoring, and analysis of any technical assistances in the field. A bi-weekly virtual meeting with mWater team will also be scheduled until December to develop a baseline survey of IT 4-3 and marginalized population survey of IT 2-3, IT 2-4 and IT 2-5. In December and January 2023, another visit from Solstice Institute is also scheduled to implement the capacity building plan.

The MEL team will support objective 2 team to review secondary data collection for all performance indices in December and January before the workshop with all local stakeholders is held during February – March 2023. The result of each index will be reported in APR#2 in September 2023. Parallel to that, the MEL team will also support objective 4 to conduct data collection of baseline survey HWWS starting from February to April 2023.

Five MEL specialists at regional office will regularly support the objective teams’ activity by conducting spot check and cross check at the beneficiary level to track the alignment between the workplan and its implementation progress. In the last quarter of PY2, the MEL team will also facilitate a pause and reflect session with internal and external partners to gain best practices of key activities implementation and their achievements of performance indicators and produce learning from the process.

For the Impact Evaluation (also referred to as “independent study”), USAID IUWASH Tangguh will continue to partner with USAID’s Urban WASH project and NORC to conduct the data collection as needed to develop design study. In some areas, this will coincide with USAID IUWASH Tangguh’s baseline data collection exercise to avoid duplication.

Detailed PY2 MEL Team activities are presented in the Exhibit below.

Exhibit 7. PY2 MEL Activities			YEAR I TIMEFRAME											
ACTIVITY	INPUT	OUTPUTS	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Disseminating Activity Monitoring, Evaluation and Learning Plan (in collaboration with Communication team)	Meeting and desk study	Common and deep understanding among USAID IUWASH Tangguh staff												
Continue develop TAMIS for performance indicators tracking and reporting	Design work, STTA and LTТА	MEL and Workplan sections created and populated in the USAID IUWASH Tangguh TAMIS												
Conduct regular meetings with MEL team and mWater team	Workshop, LTТА, STТА	Capacity building on data tracking and monitoring tools and planning using mWater												
Conduct baseline secondary data review and data collection for IT 4-3, IT 2-3, IT 2-4 and IT 2-5	Workshop, LTТА	PY2 target developed and agreed												
Support Implementation of Impact Evaluation	Workshop, Meeting and LTТА	Input to methodology of Impact Evaluation and baseline data collection supported												

3. PY2 AWP - DETAILED TASK DESCRIPTION

This chapter provides 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 2. It also presents key partnerships, cross-objective integration plans, contributions of activities under each objective to the MEL targets, and key milestones and timelines for PY2 implementation.

3.1. OBJECTIVE 1: STRENGTHENED 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 economically viable WASH and WRM activities. Private sector investment in WASH and WRM improvement is expected to fill GOI funding gaps. Additionally, strengthening the governance of WASH and WRM services through strengthening the enabling environment by improving the policies and regulations both at national and local level will strategically achieve the target of safely managed drinking water and safely managed sanitation for RPJMN 2020-2024 and SDG 2030.

In PY2, the team will continue facilitating its partners at both national and local level in strengthening the governance and financing for WASH and WRM service improvements to achieve the RPJMN 2024 and SDG 2030 targets. The activities during Year 2 will cover the development of policy and regulations, utilization of various of funding sources that include private sector investment and improvement of the capacity of WASH institutions. To achieve the target of High Level [HL.8.4-1] of Value of new funding mobilized to the water and sanitation sectors, the team in this period begins to facilitate cities and districts (PDAM) to expand the distribution pipelines and work for house connections anticipating the additional water from the regionalized water supply project. The projects include Mebidang, Wosusoka, Umbulan, Karian, Jatiluhur and Mamminasata with total capacity of the entire system is approximately 16,950 LPS that serve 1.35 million households and the alternative financing is part of financing source type being supported for the projects.

3.1.1. PARTNER COLLABORATION

The Objective 1 team will continue previous collaboration with related partners at national and local partners in Year 2 to facilitate several programs to strengthen governance and financing of WASH and WRM services. The exhibit below briefly highlights key partners in the activities and the broad areas of collaboration.

Exhibit 8. Objective 1 Key Partners

Partner	The activity
BAPPENAS	Facilitate Directorate of Housing and Settlement (Perkim) to develop the GOI funding facility regulation for WASH microfinance program
Ministry of Finance	Facilitate the Directorate of Investment Management System (SMI) to develop the GOI funding facility regulation for WASH microfinance program and support Fiscal Policy

Exhibit 8. Objective I Key Partners

Partner	The activity
	Agency (BKF) in developing the regulation of domestic waste-water tariffs that are exempt from value added tax (VAT)
FORKALIM	Facilitate FORKALIM to develop the regulation of domestic waste-water tariffs that are exempt from value added tax (VAT) charge.
Ministry of Home Affairs (MOHA), SUPD II directorate	Facilitate MOHA, SUPD II directorate for SPM mainstreaming and scaling up at local government.
MOHA, BLUD, BUMD, BUMDES directorate	Support the directorate of BLUD, BUMD, BUMDES to promote UPTD into BLUD organization for sanitation services.
Ministry of Public Works and Housing	Support the Water supply directorate for regionalized SPAM for the off-taker's distribution networks expansion program to absorb water from the system.
	Support the capacity building program of water and sanitation sector under the training center (BTAM and BTS) for financial aspects.
	Support the Water Supply Directorate to issue the Directorate General's Decree for PDAM Performance appraisal guidelines by adopting the PDAM Index as a PDAM internal evaluation tool.
	Facilitate the study and advocacy of Regionalized water supply system institutions in accordance with relevant laws and regulations.
PT Sarana Multi Infrastruktur (PT SMI)	Support PT. SMI in providing the municipal loan (pinjaman daerah) for local government financing of the infrastructure improvement by PDAM.
Association of Indonesian Municipalities (APEKSI)	Collaboration of advocacy to local governments for improvement of WASH and WRM services.
PDAM/LG	Facilitating access to funding sources to finance the infrastructure improvement, especially for PDAM distribution line expansion to anticipate water addition from regionalized water supply system.

3.1.2. ACTIVITY INTEGRATION

In PY2, the Objective I team will continue the integration with other objectives in performing the tasks of strengthening the governance and financing the WASH and WRM services. Developing the regulation relating to the water sector, such as PDAM water tariff, will require support from objective 2-water in providing the technical inputs for the study. Regarding large scale PDAM investment, for example the distribution expansion to absorb the additional treated water supplied by regionalized water supply at some locations such as Mebidang, Wosusoka, Umbulan and Mamminasata, the financing team will closely collaborate with Objective 2a (water). Of these projects, the Mebidang project is producing 1,100 liters per second (LPS) of treated water benefiting approximately 88,000 new households in Kota Medan, Deli Serdang, and Binjai; Wosusoka has 750 LPS capacity and will distribute treated water to Wonogiri, Sukoharjo, Solo and Karanganyar creating 60,000 new connections. Similarly, new construction in Umbulan, East Java province, is planned to produce 4,000 LPS for Surabaya, Gresik, Sidoarjo, and Pasuruan cities and districts providing 320,000 households with new drinking water service. Meanwhile, in Mamminasata, South Sulawesi 1,000 LPS of water produced is planned to serve 80,000 households downstream in Makassar, Gowa, Maros and Takalar. Off-taker cities and districts plan to access the alternative financing from private funds or blended financing or municipal loan of PT SMI to finance the distribution pipe expansion. Similarly, at sanitation and WRM services, the team will also engage with

Objective 2b (sanitation) and Objective 3 to ensure the technical inputs strongly support the financing program.

3.1.3. TASK BY TASK DETAILED DESCRIPTION

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

Strengthening the governance of WASH/WRM services and strengthening the enabling environment by improving the policies and regulations at the national and local level are essential to support the achievement of RPJMN 2024 and SDG 2030 targets in the water and sanitation sectors. In Year 2, we will support the national and local government develop and improve the policies and regulations and build the capacity of stakeholders in the WASH and WRM sectors. To do so, in year 2, the team will continue identifying and begin developing needed policy and regulatory reforms. Stakeholders from national and local level will be involved in the development process of regulations and policies, for example the Directorate of Water Supply, and the Ministry of Public Works and Housing for the regulation of the institution of regionalized water supply system. Similarly, for the regulation of sanitation service fees, USAID IUWASH Tangguh will closely engage the Directorate of Sanitation of MPWH and the Ministry of Home Affairs. USAID IUWASH Tangguh will encourage and facilitate consultation of local stakeholders for all regulatory development.

Task 1.1.1. Develop and facilitate policies and regulations for improved WASH/WRM processes at national and local government levels

In PY2, the team will continue reviewing or identifying the existing policies at the national and regional levels related to WASH/WRM improvement program. During PY2, support will be provided for stakeholders including the central and local government to develop and revise draft policies and legislation as follows:

- The establishment of regulations of the local institution of the integrated water and sanitation service, support to the Ministry of Public Works and Housing (Water and Sanitation Directorate), Ministry of Home Affairs (BUMD Directorate) and local governments, such as Surabaya, Salatiga and Magelang city.
- Encourage the further development of WRM institutions in the regions, support to the Ministry of Environment and Forests, and the Ministry of Public Works and Housing.
- Support the Ministry of Public Works and Housing, and the Directorate of Water Supply conduct a study and advocate for promotion of regionalized water supply systems.
- Developing the new policy and regulation of sanitation promoting the sanitation provider institution from UPTD into BLUD through support to the Ministry of Home Affairs and local government, such as in Magelang city and Sukoharjo.
- Support PERPAMSI and the Coordinating Ministry for Maritime and Investment Affairs to develop the regulations for value-added tax of the raw water purchased by PDAMs.

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

USAID IUWASH Tangguh in PY2 will prioritize issues that offer the most promise for reform of WASH built during the USAID IUWASH PLUS program. Of these processes, the WASH microfinance financing facility regulation is still being processed by the Ministry of Finance, similarly the VAT exemption for wastewater is in process by the Fiscal Policy Agency of the MOF.

Several policies and regulations in the development process that need to be completed include:

- Support Bappenas and the MOF to continue processing development of the regulation for the WASH microfinance financing program supported by GOI funds.
- Support the Ministry of Public Works and Ministry of Home Affairs (MOHA) to follow up on the sanitation tariff guidelines as a reference for developing the Sanitation Tariff.
- Work with the MOHA, SUDP2 directorate to prepare SPM guidelines, implementation, and monitoring tools for local governments.
- Support the MOHA, to develop technical guidelines for establishing BLUD, implementation and monitoring tools

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 service improvement, in PY2 USAID IUWASH Tangguh will organize inclusive stakeholder consultations to ensure that there is a transparent process for commenting on pending government policy and regulation.

The association of Indonesian Municipalities (APEKSI) in year 2 will start to collaborate with USAID IUWASH Tangguh in supporting the acceleration of WASH and WRM improvement at local level through providing advocacy for local government, for example to issue regulations and create other related programs. Additionally, the collaboration with PT Sarana Multi Infrastruktur (PT. SMI) will continue in year 2 utilizing a variety of PT SMI financial products to fund WASH and WRM service improvement. The local government can establish the financial policy to resolve the limited local budget by accessing to the Pinjaman Daerah/Municipal Loan provided by PT SMI to finance the WASH and WRM service improvements.

At the regional level, the team will start to engage with local associations related to WASH and WRM services to assist in providing the knowledge of the sectors aiming to enable them to support the regulation and policy being developed. Pokja AMPL at city and district level and DPD PERPAMSI at provincial level will be engaged for similar program. Activities to stimulate stakeholders to support the regulation development process at national and local level will follow:

- Engaging with APEKSI and APKASI to support the intervention of USAID IUWASH Tangguh programs at city and district levels.
- Engaging with AKOPSI to support the interventions of USAID IUWASH Tangguh sanitation programs at city and districts level.

- Engaging with Pokja AMPL at city and district level and DPD PERPAMSI provincial level to share the WASH and WRM programs to enable support the achievement of RPJMN 2024 and SDG 2030 target.
- Engage the private sector such as the private truck companies at several potential city/districts to have complete information of the LLTT system.

Outcome 1.2. Public and Private Budgets and Expenditures that prioritize equitable, gender responsive, climate-resilient, and sustainable WASH and WRM services increased

Outcome 1.2 of USAID IUWASH Tangguh will tackle the financing and investment for drinking water, wastewater projects, and WRM service improvement. USAID IUWASH Tangguh will review, assess, and advise on the existing conditions of the financial statements and regional fiscal capacity. Additionally, the team will aid the development of service expansion plans and in developing project investment pipelines to seek financing. The planning will be developed into full project designs and registered into institutional or/and government programs. The ongoing large-scale pipeline projects will be prioritized for assistance, USAID IUWASH Tangguh will identify potential areas for private sector involvement and related financiers, and it will be a continuing effort year by year through various activities.

Task 1.2.1. 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 to improve the visibility and understanding of tariff structures, operations and maintenance expenses, and capital improvement programs.

The financial flow tracking system will monitor and analyze the financial condition of local governments related to WASH and WRM sector development. Regional USAID IUWASH Tangguh staff will collect WASH/WRM development planning data from RPJMD (sanitation/WRM) and PDAMs for water to assess existing financial aspects. The existing financial criteria need to be established, such as asset and liability, level of full cost recovery (FCR), current ratio and billing collection efficiency.

Additionally, for local government data, USAID IUWASH Tangguh will also collect data of historical local budget (APBD) year 2016 to 2021 and identify the WASH and WRM allocation and conduct city and district fiscal capacity assessments of the LGs. The information will include the annual income, annual debt payment, existing budgets on water, sanitation and WRM, planning on water and sanitation projects, analysis of 20% of the annual income that can accommodate potential additional public debt and the availability of payment schemes or measuring the debt coverage ratio.

The tracking system will be developed through the mWater application. The national and regional officers will be trained how to use the mWater application so that they can then train PDAM officers. The use of the mWater application will efficiently assist financial tracking of PDAM operations and will assist in developing the water service expansion. The mWater application will also be able to assist the APBD or regional government budget tracking tool.

The result of local fiscal assessments will be used as the basis to apply for government loans such as the facility from PT Sarana Multi Infrastruktur (SMI) to finance water and sanitation service improvements. Activities conducted in Year 2 will include:

- Develop a basic model for improved financial data flow for all local government partners;
- Collect data of WASH/WRM development plan from RPJMD (sanitation/WRM) and PDAM (water) to conduct an assessment of existing financial aspects using the basic model;
- Collect historical local budget (APBD) data from 2019 to 2021, identify the WASH and WRM allocation and conduct regional fiscal capacity assessment of the LGs;
- Conduct FGDs to analyze the results with local government in all locations.
- Integrate the basic model into the mWater platform and trial the improved model and hold discussions with local governments.

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 conduct a strategic financial planning exercise to identify, analyze, and prioritize expenditures and required investments in their WASH/WRM development plan. The existing analysis will then be used to assist LGs, PDAMs and UPTDs to develop plans to expand the coverage of water and wastewater services in the region. To develop planning in this stage, the Objective 1 team will collaborate with Objective 2 to define the target of each regional office. To do so, the regional office will coordinate with the PDAM/WRM, sanitation provider institution and local government to get their overview of service expansion to ensure the planning is viable for them. USAID IUWASH Tangguh will then assist local government to further develop selected plans with a development of Pre-FS and or Business Plan such as of increasing the water treatment plant capacity and/or expanding piping networks.

In PY2, the regional offices of USAID IUWASH Tangguh will assist each LG and PDAM / WRM / sanitation institutions to develop their expansion plan. The financing of Pre-FS and Business Plan will be financed from internal sources of the institutions (LGs and PDAM/ WRM / sanitation institution). Activities in PY2 will be:

- Work with local government to increase the budget allocation through facilitating in setting the sector development plan.
- Develop the financial plan for the potential selected priority projects across the regions in the form of pre-FS or business plan.
- Discuss the draft of financial plan with the local governments to identify financing sources
- Connect the financiers including PT SMI to local governments to assess the viability of financing priority projects.

Task 1.2.3. Identify financing opportunities and create pipeline of WASH-IWRM-related investments

USAID IUWASH Tangguh will develop a pipeline of viable WASH/WRM investment opportunities by focusing on two transaction workstreams: 1) 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.

In year 2 USAID IUWASH Tangguh will begin the identification and assessment of potential projects from all regions or cities/districts using the financial plan document that has been discussed and approved by PDAM and local government both for water and sanitation service improvement programs. The selected projects will then require detailed analysis including feasibility studies, basic engineering design and other analysis to ensure the project documents are completed and ready for the procurement and the financing close process from the GOI and private sector investment. The analysis will commonly consist of market, financial and economic aspects such as internal rate of return (IRR), net-present value (NPV), and break-even point (BEP) that are acceptable by the government and private sector firms. USAID IUWASH Tangguh will facilitate the potential project's procurement process through matchmaking among the actors with local government as the project's owners. The financier or private sector firms, with facilitation by USAID IUWASH Tangguh, may be involved in the process such as developing the feasibility study and design work following the selected procurement contract being developed by the local government or PDAM.

To fund the water resource management (WRM) service improvement projects that are less likely to be cost recoverable, funding could potentially be sourced from central government, for example, under the Ministry of Environment and Forestry or from grants of international institutions which leverage green and blue energy and climate change resilience funding.

Compile the project info into the pipeline

Using the initial identification that was conducted in PY1 in several locations across the regions, potential projects will consist of two types: large-scale projects and small-scale projects.

A. Large-scale Pipeline Projects:

- a. SPAM regional Wosusoka, Central Java
- b. SPAM regional Ir. H. Djuanda (Jatiluhur II), DKI Jakarta
- c. SPAM regional Jatiluhur I, West Java
- d. SPAM regional Karian-Serpong, Banten
- e. SPAM regional Umbulan, East Java
- f. SPAM regional MEBIDANG, North Sumatra
- g. SPAM regional Mamminasata, South Sulawesi
- h. Jakarta Sewerage System (JSS) Zone I, DKI Jakarta

In PY2, USAID IUWASH Tangguh regional offices will update the status of the listed large-scale pipeline projects and define the assistance services as needed. The focus of USAID IUWASH Tangguh assistance will be for expansion of distribution lines within the area of the city/districts as the off taker of SPAM regionals to ensure that treated water purchased from the system is effectively sold to their customers to avoid idle capacity. Various funding sources (see Exhibit 9 below) to support the expansion of distribution lines, especially from the private sector or commercial funds, will be introduced to the PDAM and local government by USAID IUWASH Tangguh to include provision of technical assistance in obtaining funding. Continuous facilitation by USAID IUWASH Tangguh will be provided to the project until the project is complete or achieves financial close.

B. Small-Scale Pipeline Projects

For the small-scale pipeline projects, USAID IUWASH Tangguh will facilitate financing via local government funds (APBD) or micro finance, venture companies, or CSR from the private sector. Potential projects include:

- a. New household connections;
- b. Communal sanitation systems (SPALDS/SPALDT);
- c. Wastewater treatment plant, desludging, and transportation;
- d. Septic tank per Household.

Estimated project value and potential financier: Potential projects, estimated beneficiaries, project values, and financiers are illustrated in the following table. Expansion as envisioned will provide benefits to over 1,356,000 households and will require over \$280.55 million in capital financing. The Objective 1 team will assist the PDAMs as the off-taker to develop their business plans for expansion and will invite lenders and financiers to finance the projects. The amount of financing targeted for PY2 will be aggregated from regional office estimates based on the existing assessments and business plans.

Exhibit 9. Project Value and Potential Financier: Distribution Line Expansion of Regionalized Water Supply System

Project	Production Capacity (LPS)	Estimated Beneficiary (HH)	Estimated Project Value	Potential Financier
Large Scale				
Mebidang	1100	88,000	Unit cost @ Rp. 3 million, Total Project Value: Rp. 4.06 trillion or \$280.55 million	Financiers: Natixis Bank (prioritize for commercial projects), Malay Exim Bank (has to involve Malaysia Contractors), Dewan Wakaf Nasional, DFC (Development Finance Corporation), Bank DKI, National Banks (sufficient equity), PT SMI (Sarana Multi Infrastruktur); Equity Partners: Suez-Vinci, Shanghai engineering, Dewan Wakaf Nasional, PT SMI (Sarana Multi Infrastruktur); Constructors (EPC Turn Key, EPC F): Hydrogate (Malaysia), UEM (Malaysia), CIMIC (Australia, Spain), Shanghai engineering (China), Jaya Konstruksi, Karya SOEs; Operators: Suez-Vinci (France), Shanghai Hydro (China)
Wosusoka	750	60,000		
Umbulan	4000	320,000		
Juanda	5500	440,000		
Karian	4600	368,000		
Mamminasata	1000	80,000		
Total	16,950	1,356,000		
Small Scale:				
New household connection				
Communal sanitation system (SPALDS/DT)				
Wastewater treatment plant, desludging, and transportation				
Septic tank per Household				

USAID IUWASH Tangguh will also advise the institutions that hold a permit to execute large-scale projects to assist financial close. USAID IUWASH Tangguh will help structure the modality of the projects. At the same time, USAID IUWASH Tangguh will help obtain government support and systemize the procurement process. USAID IUWASH Tangguh will also recommend innovative financing - blended financing which invites international institutions to provide a grant to leverage the viability of the projects. Possible funding sources include GOI funds such as APBN and APBD as equity, government support (VGF, SBOT, Subsidy, AP scheme), private sector through business to business (B to B) or public private partnerships and any of the blended financing, and grants. Blended finance may also include philanthropic or CSR funding. USAID IUWASH Tangguh will help make viable projects a success by allotting some funds for market consultation, market sounding, assisting negotiations and hiring lawyers to assist in drafting the cooperation agreements with the investors.

Activities to be conducted in year 2 and continued in the following year program will include:

- Compiling project info from potential cities/districts or PDAM into the pipeline, simultaneously promoting the project for private investment and GOI fund by facilitating PDAM / LG in its transaction process.

Providing certain financing funds that include assistance for market consultation, market sounding, support in negotiation to the potential investors and assistance with International Draft Agreement with International Investors.

Outcome 1.3 WASH and WRM Sector Institutional Capacity Increased

Task 1.3.1. Build Capacity of WASH/WRM coordination institutions

Institutional capacity is an essential element to help local government or utilities to achieve WASH and WRM service improvement targets. USAID IUWASH Tangguh will analyze the need for each local government/utility provider to improve its capacity especially to those that can accelerate the water and sanitation service coverage and fulfill the national requirement of the minimum service standard (SPM) for the sectors.

The training to local government institutions will use the indices of the sectors as basis for identifying training needs. The team will continue to revise the indices that were developed in the USAID IUWASH PLUS program. The activities will also collaborate with Bappenas or Pokja AMPL national to support the local government to set targets of RPJMN 2024 as well as the RPJMD and SPM.

In PY2, USAID IUWASH Tangguh will conduct capacity building activities for related WASH and WRM institutions, especially at the local level. Under Objective I, the training will relate to the governance and finance of the sectors such as minimum service standards (SPM), local government financial planning related to the sectors and financial aspects of water and sanitation sectors. The training activity plan will include:

- Collaborate with Bappenas to support local government setting the target of RPJMD for WASH sectors.
- Coordination with the AKKOPSI to assist the Local Government (districts/cities) to increase the Sanitation Budget in their respective Local Government Fiscal Budget (APBD).

- Assess the local government and utilities (PDAM) capacity in financial management and develop the training plan. Potential training material in finance will include PDAM tariff setting and business planning.
- Conduct the training based on the training assessment for local government and utilities (PDAM).

Outcome I.4. Increased accountability and inclusivity in WASH and WRM governance

USAID IUWASH Tangguh will help ensure that WASH and WRM governance includes publicly accessible information and data to help communities engage with WASH providers, utilities, and local government. This activity will engage multi stakeholders in the WASH and WRM sectors.

Task I.4.1. Expand mechanism to promote social accountability and inclusivity

The Objective I Team in PY2 will conduct several activities related to expand the mechanism to promote social accountability and inclusivity as follows:

- Collect data from local governments of current situation on WASH, WRM and gender governance as the baseline of Government Index (Godex).
- Encourage public accountability with institutions so that the public has access to non-confidential information, dialogue, and communication. The Citizen Engagement Mechanism (CEM), which was developed during USAID IUWASH PLUS, will continue to be utilized, strengthened, and expanded in USAID IUWASH Tangguh cities/districts.
- Develop distribution channels for public engagement to ensure more interactive participation with Local Government, PDAM, and Wastewater operators. Channels include SMS Gateway platform, customer hotline, social media platform, periodic offline and online events to gain relevant input from the public.
- Engage with Local Government and the Ministry of Communications and Information (MENKOMINFO) to align WASH promotion and advocacy into national and district/city programs.
- Engage with BAPPENAS (national level), BAPPEDA (regional level) and Pokja PPAS/AMPL to support WASH advocacy programs toward Local Governments. The support includes a sharing session, an in-depth workshop, and meetings on WASH advocacy, regulations, RPJMN/RPJMD and APBD.

Activities for PY2, including associated outputs, and implementation timelines, are presented in the exhibit below.

Exhibit 10. Objective 1 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	LOCATION	YEAR 2 TIMEFRAME													
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
<p>Task 1.1.1.</p> <p>Develop and facilitate policies and regulations for improved WASH/WRM process at national and local government level</p> <p>Identify the existing regulations and find the gaps for the basis of following activities on national and regional levels, which include the following regulations:</p> <ol style="list-style-type: none"> 1. Regulation of the integration institution of water and sanitation service. 2. Regulation of WRM institution in the region. 3. Regulation of the ideal institution of regionalized water supply system. 4. Regulation to encourage UPTD to become BLUD, or BLUD to become BUMD. 5. Regulation of value-added tax of PDAM raw water cost. 	<p>Desk review, Meetings, FGD, PO</p>	<p>List of regulation/p olicy required for WASH/WRM improvement</p>	National														

Exhibit 10. Objective 1 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	LOCATION	YEAR 2 TIMEFRAME												
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
<p>Task 1.1.2.</p> <p>Prioritize pathways for passage and implementation of draft policy and regulations.</p> <p>Compile a list of existing draft policies regarding WASH/WRM at national and regional levels that include:</p> <ol style="list-style-type: none"> 1. Draft regulation for the WASH microfinance financing program. 2. Draft regulation/guidelines of sanitation tariff. 3. Draft regulation/guidelines for SPM implementation and monitoring tools. 4. Draft regulation/guidelines for establishing BLUD, implementation and monitoring tools. 	<p>Desk review,</p> <p>Meetings,</p> <p>FGD</p>	<p>List of regulation/policy required for WASH/WRM improvement</p>	National													
<p>Task 1.1.3.</p> <p>Stimulate participation of diverse stakeholders in broader policy reform and enforcement of initiatives agenda.</p> <p>Engage with APEKSI to support national and local programs.</p>	<p>Meetings,</p> <p>FGD,</p> <p>Workshop</p>	<p>Workplan and activity implemented</p>	National													
<p>Engage with APKASI to support national and local programs</p>	<p>Meetings,</p> <p>FGD,</p> <p>Workshop</p>															
<p>Engage with AKOPSI to support national and local programs</p>	<p>Meetings,</p> <p>FGD,</p> <p>Workshop</p>															
<p>Engage with Pokja AMPL) at city and district level and DPD PERPAMSI.</p>	<p>Meeting,</p> <p>FGD, LTTA</p>															

Exhibit 10. Objective 1 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	LOCATION	YEAR 2 TIMEFRAME													
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
<p>Task 1.2.1.</p> <p>Improve data flows to identify financial flows and gaps at the WASH/WRM sectoral level.</p> <p>Develop the basic model for improved financial data flow.</p>	Meeting, FGD, LTТА	Basic model completed	National														
<ul style="list-style-type: none"> Collect data of WASH/WRM development plan from RPJMD (sanitation/WRM) and PDAM (water) to conduct assessment of existing financial aspect using the basic model. 	Meeting, FGD, LTТА	Analysis of existing financial completed	Local														
<ul style="list-style-type: none"> Collect data of historical local budget (APBD) year 2019 to 2021 and identify the WASH and WRM allocation and conduct regional fiscal capacity assessment of the LGs and discuss with LGs. 	Meeting, FGD, LTТА	APBD analysis completed	Local														
<ul style="list-style-type: none"> Improve the basic model into the mWater platform and do the trial of the improved model and discussion with local governments. 	Meeting, FGD, LTТА	mWater platform is completed	National														
<p>Task 1.2.2.</p> <p>Support financial planning and analysis at LG, PDAM and UPTD service providers.</p> <ul style="list-style-type: none"> Facilitate local government to increase the allocation when setting the sector development plan. Develop the financial plan of the potential selected project across the regions in the form of pre-FS or business plan. Discuss the draft of financial plan with the local governments to include financing sources. Connect the financiers to include PT SMI to 	Meeting, FGD, LTТА	Financial planning completed	Local														

Exhibit 10. Objective 1 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	LOCATION	YEAR 2 TIMEFRAME											
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
				participate in financing the projects.											
<p>Task 1.2.3.</p> <p>Identify financing opportunities and create pipeline of WASH/WRM related investment.</p> <ul style="list-style-type: none"> Compile the project info from potential city/district or PDAM into the pipeline, simultaneously promoting the project for private investment. Facilitating financing access that includes assistance for market consultation, market sounding, support in negotiation to the potential investors and assisting International Draft Agreement with International Investors. 	Meeting, Workshop, FGD, LTTA	Potential projects are identified	Local												
<p>Task 1.3.1.</p> <p>Build capacity of WASH/WRM coordination institution.</p> <p>In collaboration with sectors and SBC objective, develop the revision of the existing indices (Godex, Sandex and PDAM index) to add the WRM and GRDP parameters to measure the increase.</p>	Meeting, Workshop, FGD, LTTA	Revised indices completed	National												
Collaborate with Bappenas to identify the activities of supporting LG for setting the RPJMD target to achieve the RPJMN 2020-2024 target for WASH sectors.	Meetings, LTTA, FGD	Activity's scoping and plan gathered from Bappenas	National												

Exhibit 10. Objective 1 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	LOCATION	YEAR 2 TIMEFRAME												
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Assess the local government and utilities (PDAM) capacity for the financial aspects and develop the training plan. Potential training material in area of finance will include PDAM tariff setting and business plan.	Meetings, LTTA, FGD	Assessment of PDAM and local government completed	Local													
Task 1.4.1 Expand mechanisms to promote social accountability and inclusivity. Refine Godex and APBD tracking indicators to include accountability and gender responsiveness based on city and district contexts.	Meetings, FGD	Godex consists of accountability and inclusivity parameters	National													
Ensure PDAM and Sanitation indices incorporate accountability and gender responsiveness terms.	Meetings, FGD	PDAM Index and Sanitation Index consists of accountability and inclusivity parameters	National													
Expand and scale Citizen Engagement Mechanism (CEM) for WASH/WRM sector through radio programming, civic forums, SMS gateways, customer complaint hotlines, and social media platforms. Use Panduan CEM as reference.	Meetings, FGD, Events	CEM platform implemented	National													

Exhibit 10. Objective 1 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	LOCATION	YEAR 2 TIMEFRAME													
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
<ul style="list-style-type: none"> Develop platform innovation for data collection and visualization to improve feedback so that the public can easily comment on and question decision making (identify innovation model, understand PIF mechanism, prepare SOW, bidding process, platform selection, development stage, implementation stage). 	Meetings, FGD, STTA	Innovation Platform for data collection and public access															
<ul style="list-style-type: none"> Support BAPPENAS and Pokja PPAS/AMPL to develop and disseminate advocacy and communication materials to ensure that LG understand and commit RPJMN 2020-2024 targets through their planning process. 	Meetings, FGD, Workshop	List of meetings, FGD, and workshops on WASH RPJMN advocacy															

3.2. OBJECTIVE 2A: INCREASED ACCESS TO POOR INCLUSIVE, CLIMATE RESILIENT, SAFELY MANAGED DRINKING WATER SERVICES

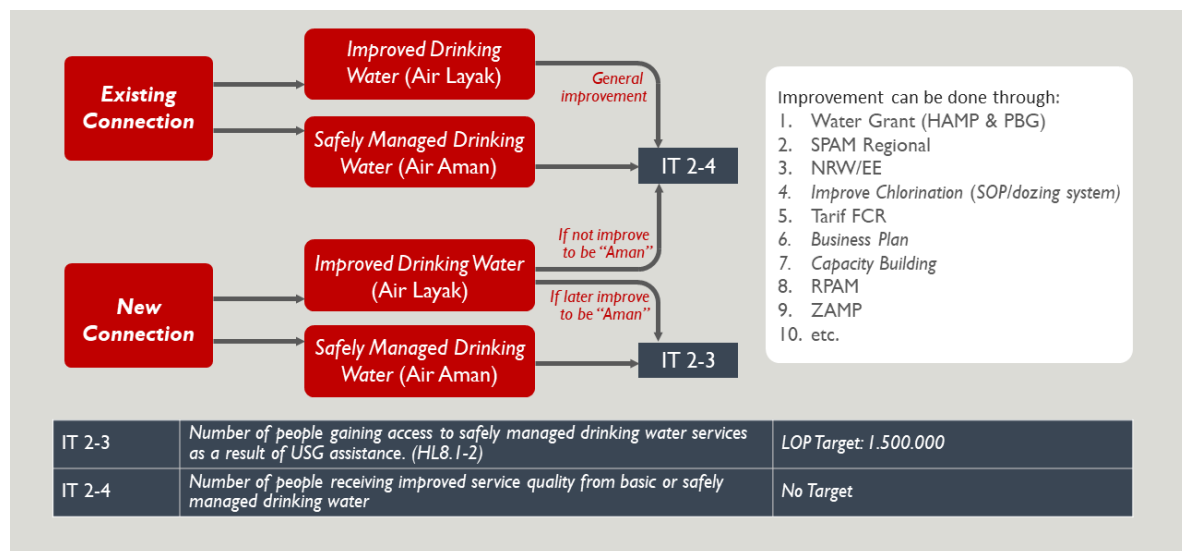
USAID IUWASH Tangguh aims to increase access to safely managed drinking water for 1.5 million people (375,000 households) over the LOA, and in doing so contribute to the RPJMN 2020-2024, which has the target of 15 percent of households accessing safely managed drinking water by 2024. To achieve this 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 the workforce development framework to support service providers, 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.

The two main outcomes to be achieved by Objective 2 are Outcome 2.3 Number of people gaining access to safely managed drinking water service as a result of USG assistance and Outcome 2.4

Number of people receiving improved service quality from basic or safely managed drinking water. The flow of how to count the two outcomes can be seen in the following graph.

Exhibit 11. Intervention strategy to Achieve Safely Managed Drinking Water (SMDW)



In order to achieve the target of safely managed drinking water (SMDW), whether upgraded from the existing connection (clean water to SMDW) or a new connection (to a system that already has SMDW), USAID IUWASH Tangguh will support interventions with the PDAM to encourage performance improvements across several aspects, including: (1) financial full cost recovery tariffs; (2) services (Water Hibah for HC); (3) operations (NRW, EE, water quality); (4) HR (GESI mainstreaming); (5) administration (SOP, Business Plan); and (6) climate resilience (WRM and RPAM). These aspects are monitored through the PDAM Performance Index. Therefore, USAID IUWASH Tangguh will implement some interventions that can be measured in the PDAM Index to achieve SMDW. As stated in the chart above, IT 2-4 can be achieved through intervention on existing connections and IT 2-3 can be achieved through intervention on new connections.

3.2.1. PARTNER COLLABORATION

The Objective 2a Water team will collaborate with partners from government, donors, universities, and the private sector. In PY2 USAID IUWASH Tangguh will collaborate with MPWH in developing guidelines for assessing PDAM performance, provincial level RPAM training (TOT), finalizing the MIS RPAM tools and collaboration in encouraging the participation of PDAMs in the *Water Hibah* program. The team will also collaborate with PERPAMSI to socialize the use of MIS RPAM tools in PDAMs, especially in PDAMs with USAID IUWASH Tangguh partners, and workshop on identification of gaps in the capacity of water providers especially between PDAMs that are sick, less healthy, and healthy, and provide capacity building packages to support recommendations. Furthermore, the team will collaborate with BTAM in order to encourage BTAM (Balai Teknologi Air Minum), Pontianak City PDAM, Tangerang Regency PDAM, and Malang City PDAM to become PDAM training centers.

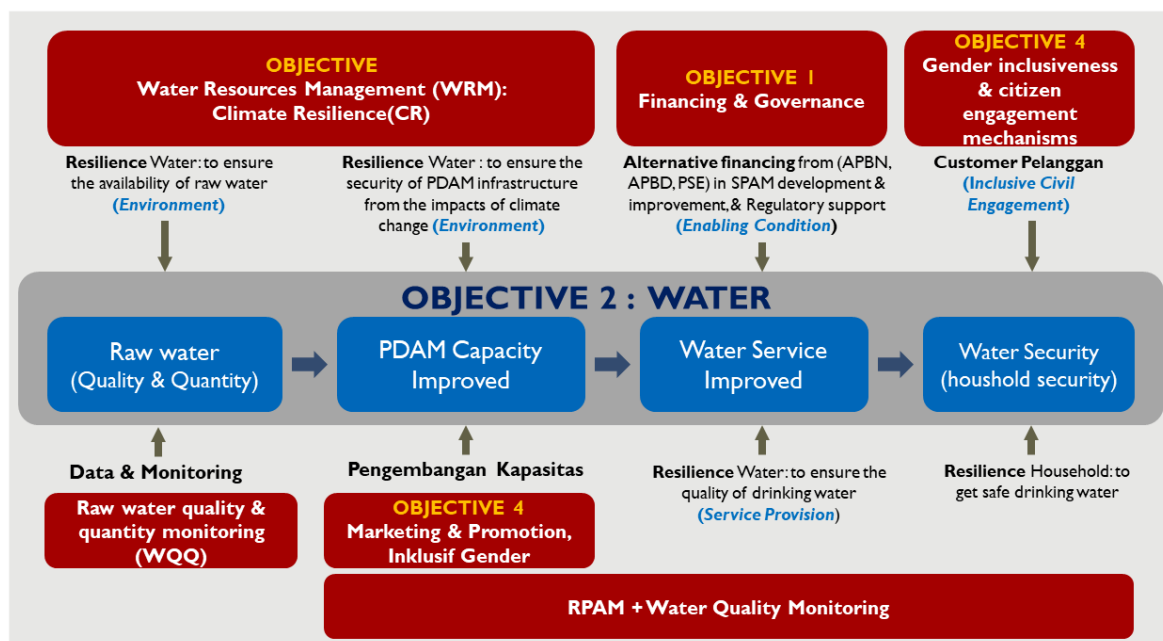
Exhibit 12. Objective 2a Key Partners

Partner	The activity
BAPPENAS	Coordination in progress of USAID IUWASH Tangguh
MPWH Directorate of Water Drinking	In developing guidelines for assessing PDAMs performance, provincial level RPAM training (TOT), finalizing the MIS RPAM tools, and collaboration in encouraging the participation of PDAMs in the Water Hibah program
Balai Teknologi Air Minum (BTAM)	To encourage BTAM, Pontianak City PDAM, Tangerang Regency PDAM, and Malang City PDAM to become PDAM training centers
PERPAMSI Central Project Management Unit (CPMU)	To socialize the use of MIS RPAM tools in PDAMs, especially in PDAMs with USAID IUWASH Tangguh partners, and workshop on identification of gaps in the capacity of Water Providers especially between PDAMs that are sick, less healthy, and healthy, and provide capacity building package support recommendations
Central Project Management Unit (CPMU)	Collaboration in encouraging the participation of PDAMs in the Water Hibah program

3.2.2. ACTIVITY INTEGRATION

In PY2, Objective 2a Water will collaborate with Objective 1 in the context of developing, improving, and optimizing SPAM, the activity will begin by identifying the need for SPAM investment in all districts/cities then the Objective 1 team will focus on finding alternative financing from the APBD, APBN, and PSE to address these needs. In addition, Objective 2a Water collaborates with Objective 3 in compiling a water resilience assessment against climate change and an action plan with the results of the study later incorporated into the PDAM's business plan to be budgeted and implemented. SOPs for staff recruitment and customer relations developed under this objective will ensure gender and social equity in collaboration with Objective 4.

Exhibit 13. Integration and Collaboration



3.2.3. TASK BY TASK DETAILED DESCRIPTION

Outcome 2.1. Capacity of professionalized WASH and WRM workforce increased

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. The Objective 2A Water Team will support BTAM in the implementation of the PDAM/BUMD capacity building road map by making Akatirta a competency-based and certified training center of excellence. Additionally, the team will encourage financing for capacity building and training in the PDAM Index and adoption by LGs and PDAMs into the PDAM Business Plan to encourage sustainable and continuous increases in the capacity of PDAMs 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 staff to improve their technical knowledge and management capacity; and
- Deliver a technical support package to BTAM and Akatirta that is tailored to advancing their progress towards achieving PDAM Training Center of Excellence status.

In PY2, USAID IUWASH Tangguh will collaborate with PERPAMSI and MPWH in conducting FGDs to prepare a training needs assessment according to the PDAMs performance category (sick, unhealthy, healthy) associated with staff career development. We will then hold a series of FGDs with BTAM-Dit. AM MPWH, PERPAMSI and Akatirta to follow up the Road Map of Capacity Building for PDAMs/BUMDs and tasks for each institution. A review of the drinking water supply occupational map will be also conducted in PY2.

In PY2, the project will identify potential training topics in BTAM and 3 PDAMs training center (PDAM Pontianak City, Tangerang District, and Malang City), followed-up by training to increase the number of PDAMs instructors with GESI inclusion. Finally, a new scheme for the training certification system will also be developed.

Outcome 2.2. Performance of drinking water and sanitation service providers increased

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). 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, PDAMs with USAID IUWASH Tangguh support will ensure that drinking water is safely managed by ensuring/reducing bacteriological contamination in the PDAM distribution network through decreasing NRW, so that bacteriological contamination (E-Coli) that contaminates 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 a key part of sustainability. The Objective 2A Water Team will continue NRW reduction and Energy Efficiency activities that are supported by GOI Performance Based Grant (PBG) program. In USAID IUWASH PLUS program, the activities that have been conducted include the preparation of pre-feasibility study, SOP and DED. From the results of pre-feasibility, USAID IUWASH Tangguh will integrate the program recommendations into the Business Plan to ensure the budgeting and implementation. In accordance with the Performance Work Statement, specific activities include:

- Increase water access to the poor through collaboration with the water grant program by GOI. The team will identify potential recipient households by conducting technical mapping of access levels and gender and wealth parameters through the mWater tool, and then carrying out marketing and promotions into target areas.
- Develop and improve PDAM GIS/MIS to support planning, developing, operating, maintaining and real-time monitoring of the water supply system.
- Strengthening PDAM Capacity for NRW reduction program engagement and energy efficiency (EE) Improvement Program in order to reduce operating costs and apply them towards improved service delivery, to encourage participation in the Performance Based 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 encourage the achievement of safely managed 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.

In PY2, USAID IUWASH Tangguh will conduct a series of FGD with Dit.Am MPWH to prepare a timeline of water grants for the poor (*Hibah Air Minum Perkotaan/HAMP*) and Performance Based Grants (*Air Minum Berbasis Kinerja/AMBK*) for NRW and energy efficiency (EE). This includes the

determination of proposed locations to participate in and review of progress of the readiness criteria. Next, the regional team will conduct a socialization to follow-up the HAMP and AMBK programs with PDAMs and LGs. For PBG, USAID IUWASH Tangguh will focus on locations that have started the preparations since USAID IUWASH PLUS including Pematang Siantar, Depok, Sragen, Gresik and Surakarta. Meanwhile for HAMP, the project will assist 12 locations over the five regions that will be determined later based on the results of assessments.

To support increased access to safely managed drinking water through the above mechanism, Objective 2 and Objective 4 will collaborate in conducting a study of consumer willingness to connect to PDAM piped drinking water to identify the strategy for triggering access to piped drinking water. In addition, the project will also assist the GOI in preparing a marketing and promotion strategy for safely managed drinking water including encouraging the use of BJP (*Bukan Jaringan Perpipaan/Non-pipe Network*) to be JP (*Jaringan Perpipaan/Pipe Network*).

In PY2, the project will also start socializing the development of an Asset Management application using the mWater application. This will be continued by training, at which time the regional team will continue to support asset inventory in each PDAM.

Outcome 2.3. City-wide inclusive, climate-resilient, and financially viable WASH and WRM institutional arrangements and service models established and expanded

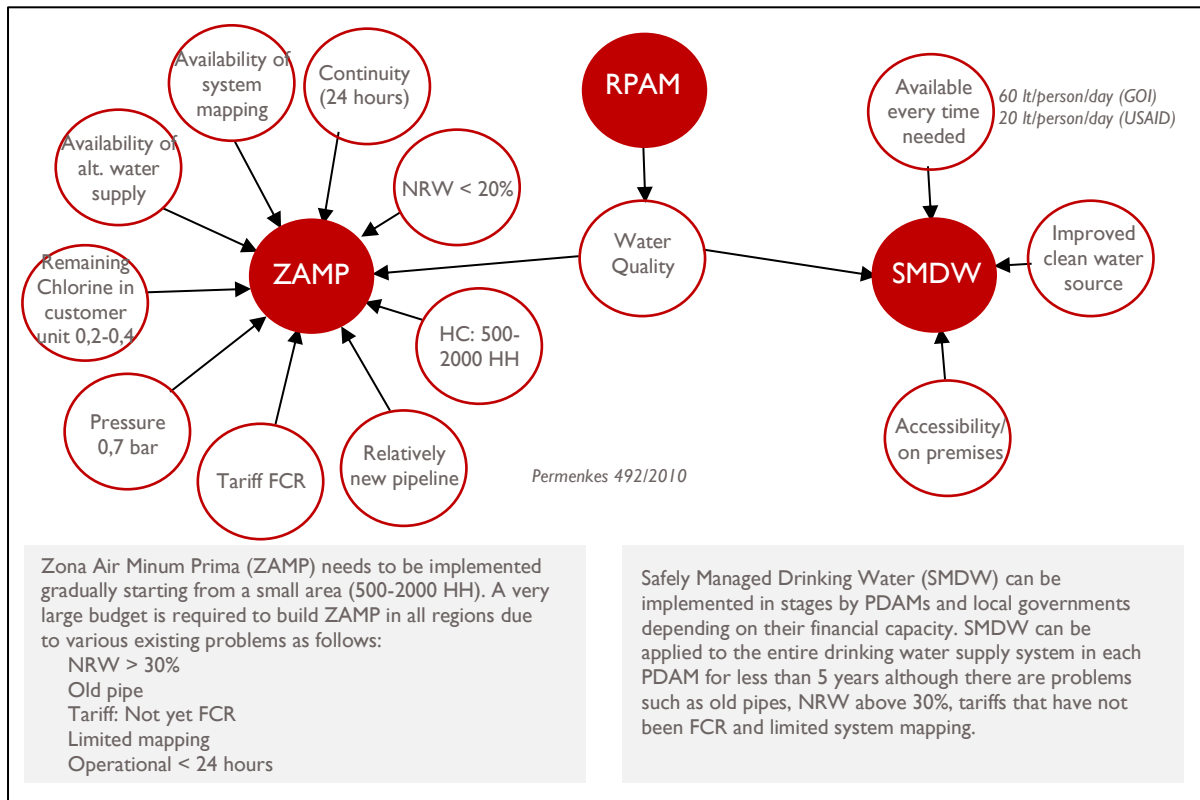
Task 2.3.1. Expand menu of service model options for PDAM and LG integration and adoption

Task 2.3.1 will ensure citywide and climate resilient safely managed drinking water, that WASH operators are financially strong, and that WRM institutional arrangements and service models established are expanded, as well as sustained and continued. This will be done by encouraging water resilience in: ensuring the availability of raw water; ensuring the security of PDAM infrastructure against disasters; ensuring safely managed drinking water quality (RPAM and ZAM); providing alternative financing (APBN, APBD, PSE) in the development and improvement of SPAM & regulatory support; encouraging Gender Equality and Social Inclusivity (GESI); and ensuring all recommended programs are continuously included in the Business Plan as part of sustainability. 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 Facilitated Water Safety Plan (RPAM).
- Develop and promote a water resilience service model through the 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.

Exhibit I4. The Link Between RPAM, ZAMP, and SMDW



As mentioned above, to achieve Safely Managed Drinking Water (SMDW), USAID IUWASH Tangguh will develop the RPAM and ZAMP. RPAM is a risk-based analysis to secure drinking water from upstream to downstream, with a focus on quality. Meanwhile, ZAMP is a special zone or area designed as a service area with water quality that meets the standards to be able to drink without processing (potable water). ZAMP has higher requirements than SMDW. However, both require water quality assurance that meets Ministry of Health Regulation 492 through RPAM implementation.

In PY2, USAID IUWASH Tangguh, together with Directorate of Drinking Water MPWH, will identify the location of SPAM development which is part of the strategy to increase PDAM house connections, whose bulk water is taken from the Regional SPAM. In the same year, the regional team will carry out an assessment of investment needs for SPAM development in each City/District to find alternative financing through the APBD, APBN, and PSE. Specifically, to support this activity to increase HC from the Regional SPAM, the project will focus on the development of distribution networks to utilize the production unit of SPAM Regional. The results of this identification activity will be followed up by Objective 1 to find alternative financing either through the APBD, APBN, or the private sector.

In addition, the project will also develop tools for several activities. First, a tool for water quality and quantity monitoring in raw water, distribution networks, and customers is needed by PDAMs. This activity aims to monitor safely managed drinking water on a regular basis. Second, a tool for MIS

RPAM/WSP will be utilized for RPAM implementation by each PDAM. The development of this tool will be followed up by provincial level training for PDAM and LG staff; and in the same year the regional team will assist the PDAM to develop RPAM document.

RPAM is a risk-based analysis with a comprehensive study starting from water sources, production, transmission, distribution, and services. Therefore, to assess the risk of water sources and raw water intake, as well as the vulnerability of PDAM infrastructure to climate change, Objective 2 team will work closely with Objective 3 team to conduct the assessment of the vulnerability of raw water sources and PDAM infrastructure to climate change.

At the national level, in PY2 USAID IUWASH Tangguh will start assisting BAPPENAS to strengthen the role of various national level stakeholders under the RPAM National Secretariat (SEKNAS RPAM) in ensuring the implementation of RPAM Roadmap and accelerating RPAM implementation.

Outcome 2.4. Monitoring, learning, and innovation platforms developed and strengthened

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 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.
- Conduct a workshop on annual monitoring of PDAM Performance Index.

In PY2, USAID IUWASH Tangguh will start to socialize the PDAM Index tools to the regional team and PDAMs. Next, the regional team will collect PDAM Index baseline data from all assisted PDAMs.

There are several changes in the indicators of the USAID IUWASH Tangguh PDAM Index against the USAID IUWASH PLUS PDAM Index. These changes include: (1) adding indicators related to safely managed drinking water: the number of samples of water quality tests and the conformity of the results to regulatory standards; (2) additional indicators related to GESI: the ratio of women employees, employee training ratio, and the ratio of women's representation in training; (3) additional indicators related to climate resilient: vulnerability of raw water and drinking water infrastructure; and RPAM availability.

In addition, the project will also conduct FGDs involving Directorate of Drinking Water MPWH and other ministries (MoH, MoHA and MoF) to review the National PDAM Performance Assessment and develop tools that combine the assessment with the PDAM Performance Index. This activity will be followed-up by the Objective 1 team to prepare the policy paper to institutionalize the

integration of the 2 indexes/assessments through MPWH Regulation or Directorate General of Human Settlements (DGHS) Decree Letter.

Activities for PY2, including associated outputs, and implementation timelines, are presented in the exhibit below.

Exhibit 15. Objective 2a PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME												
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR 3 (CONT)
Task 2.1.1: Apply workforce development framework to support service provider															
<ul style="list-style-type: none"> Meeting and FGD with some PDAMs that represent PDAMs that are sick, unhealthy, and healthy 	FGD, workshop, survey	Training need assessment according to the PDAMs performance category (sick, unhealthy, healthy)													
<ul style="list-style-type: none"> Conducting FGDs and meetings regarding Road Map of Capacity Building for PDAM/BUMD with BTAM-Directorate of Drinking Water MPWH, Perpamsi and Akatirta 	FGD/Meeting/PO	Review of occupational map of drinking water supply													
		Identification of potential training topic in 3 PDAMs training center													
<ul style="list-style-type: none"> Conducting FGD and meeting to identify training needs to increase the number of instructors and managers in increasing PDAM Performance and Staff skills 	FGD, Training	Instructors of PDAMs are increased and trained in increasing PDAM Performance, including GESI mainstreaming													
<ul style="list-style-type: none"> Organize and implement training series packages for B-TAM and PDAMs Training Center Instructors and Managers 	Training, FGD	<ul style="list-style-type: none"> Instructors of BTAM and 3 PDAM Training Center has increase Develop new certification scheme 													
Task 2.2.1: Apply Develop portfolio approaches to improving operational and financial efficiencies															

Exhibit 15. Objective 2a PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME												YEAR 3 (CONT)	
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
<ul style="list-style-type: none"> Conducting FGDs and meetings with the Directorate of Drinking WaterMPWH regarding the planning, agenda, and forms of collaboration related to the national Water Grant program, the national program PBG-NUWSP (NRW) and EE 	FGD, LTТА	Timeline with water grant of water for the poor and Performance Baser Grant (PBG), determination of proposed locations that will be encouraged to participate, progress of readiness criteria.														
<ul style="list-style-type: none"> Asset management socialization and training using the mWater app 	Training, STТА	5 PDAMs (in each of the 5 regions) can understand and operate the Asset Management (mWater) application														
Task 2.3.1: Expand menu of service model option for PDAM and LG integration and adoption																
<ul style="list-style-type: none"> Pre-assessment and identify location of new development and improvement of SPAM with the MPWH (one of them is the district/city involved in SPAM Regional) 	FGD, LTТА	To agree on areas that require SPAM development and need investment														
<ul style="list-style-type: none"> Developing Tools for Water Quality Monitoring at raw water unit, distribution, and consumers 	FGD, Survey, PO	To develop the tools of WQQ Monitoring that will be used at the PDAM														
<ul style="list-style-type: none"> Conducting the Training of RPAM Trainer for province level 	Training	To prepare the RPAM trainer for province level that they will train the														

Exhibit 15. Objective 2a PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME												
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR 3 (CONT)
		PDAM teams RPAM													
<ul style="list-style-type: none"> Procure the Individual Consultant for Water Safety Plan National Secretariat (SEKNAS RPAM) ADVISOR 	FGD, STTA	To strengthen and improve the effectiveness of the roles and functions of the SEKNAS RPAM (Bappenas)													
<ul style="list-style-type: none"> Procure the Individual Consultant for Review the MIS RPAM 	FGD, PO	MIS RPAM compiled can be executed perfectly for use by PDAM													
Task 2.4.1: Support adoption of novel data system by service providers															
<ul style="list-style-type: none"> PDAM Index baseline data collection 	FGD/Work shop	PDAM Index Baseline data collected													
<ul style="list-style-type: none"> Conduct the FGD with MPWH (Kasubdit Wil. 3 and their staff) and other institutions (MOH, MOHA, MOF) to identify the process to develop the PDAM Performance Indicator 	FGD, PO	The PDAM Index can be institutionalized until it is agreed that supporting regulations will be issued (Permen PU or SK Dirjen)													

3.3. OBJECTIVE 2B: INCREASED ACCESS TO POOR INCLUSIVE, CLIMATE RESILIENT, SAFELY MANAGED SANITATION SERVICES.

The outcomes for Objective 2 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 Objective 2b i.e., the sanitation services component. The major activities in Objective 2b for safely managed sanitation will be promoting desludging services for on-site sanitation, promoting house connection for off-site sanitation, as well as institutional capacity building for the operator and local government and supporting national government in institutional governance and policy development in sanitation management. To achieve the target of safely managed sanitation, USAID IUWASH Tangguh will support local government in preparation of readiness criteria for sanitation grant and special fund allocation (DAK) for sanitation.

USAID IUWASH Tangguh will work with partner ministries in central government to develop an enabling environment to achieve the safely managed sanitation target of RPJMN and SDG. Description of activities with central government will be discussed in the section of partner collaboration. In local governments, USAID IUWASH Tangguh will help them fulfill all the minimum requirements to implement *Layanan Lumpur Tinja Terjadwal* (LLTT). There are four criteria to implement the LLTT program: functional IPLT, functional institution, availability of regulation, and customer database. As seen in exhibit 16, seven LGs have not met any criteria, 11 LGs have met two criteria, but no clarity about operator (pending confirmation), two LGs have met three criteria, and 17 LGs have met all criteria.

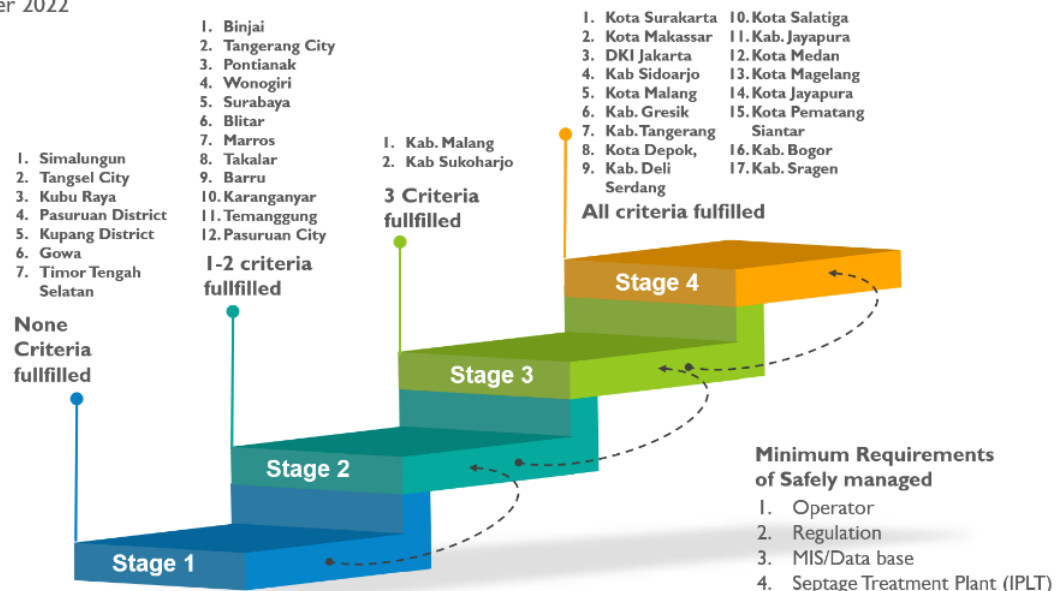
Of the 38 selected locations for USAID IUWASH Tangguh, 31 locations have IPLT and operators of domestic wastewater, while seven have neither IPLT nor the operator: Simalungun district, Tangerang Selatan city, Kubu Raya district, Pasuruan district, Kupang district, Timor Tengah Selatan district, and Gowa district. 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.

The most challenging task is to support the LGs without IPLT to implement the LLTT, as 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 to pursue the safely managed sanitation target, either with their own local budget, national funding, or through private sector funding. 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 to implement LLTT.

Exhibit 16. LLTT Status in USAID IUWASH Tangguh Locations as June 2022

Stage of Location IUWASH Tangguh

September 2022



In PY2, USAID IUWASH Tangguh will facilitate local governments in reviewing the status of the sanitation performance in terms of institutional, regulatory, technical, and financial aspects using the sanitation index. The baseline of sanitation index will be collected and discussed from December 2022 to February 2023.

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), PERPAMSI, AKKOPSI, and KIAT in promotion of LLTT in local governments. USAID IUWASH Tangguh will also work with Balai Teknik Sanitasi (BTS) to expand the training on LLTT, design of IPLT, and developing grand design of sanitation training. Exhibit below summarizes the key partners and their role in supporting the activities implemented by the Objective 2b Team.

Exhibit 17. Objective 2b Key Partners	
Partner	The activity
BAPPENAS	Coordinate the workshop of sanitation governance concept development
FORKALIM	Coordinate program collaboration i.e., twinning program, capacity building concept for wastewater operator
MOHA, SUPD2 directorate	In collaboration with objective 1, identify the potential support to MOHA, SUPD2 directorate for SPM mainstreaming and review
MOHA, BLUD, BUMD, BUMDES directorate	In collaboration with objective 1, identify the potential support to MOHA, directorate of BLUD, BUMD, BUMDES for promoting UPTD into BLUD, management of wastewater by PDAM, and tariff guidelines for domestic wastewater at local government
Ministry of Public Works and Housing, Directorate of Sanitation	Grand design domestic wastewater training at National and Local Government level Develop concept of private participation in sanitation management Review guidelines of UPTD PPK BLUD domestic wastewater
Balai Teknologi Sanitasi	Coordinate training plan for LG staff for LLTT and IPLT design
UNICEF	Coordinate WASH climate resilience tools development
The World Bank	Coordinate citywide inclusive sanitation development and piloting (CWIS)
KIAT	Coordinate sanitation program in co-location
PERPAMSI	Coordinate expansion of PDAM business on wastewater
AKKOPSI	Advocate safely managed sanitation to local government

3.3.2. ACTIVITY INTEGRATION

Objective 2 activities will be carried out in collaboration with other objectives. For example, promoting UPTD transition to BLUD and diversification of PDAM business in wastewater will require collaboration with the financial and governance components of Objective 1. Objective 2 and objective 1 will hand in hand facilitate the coordination with MoHA (Directorate of BUMD, BULD, BUMDES, Directorate SUPD II) and Directorate of Sanitation MPWH. Objective 4 will accommodate GESI throughout all Objective 2 activities, and promotion of safely managed sanitation through LLTT in local government.

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

Outcome 2.1. Capacity of professionalized WASH and WRM workforce increased

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 by participating with local governments to implement LLTT (regular desludging) program by providing training for the staff of UPTDs and LGs on LLTT and IPLT design. For the training, the team will use the guidelines developed by the Ministry of Public Works and Housing under USAID 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 will 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:

- Hold a workshop to identify the capacity gap in domestic wastewater operators.
- Provide technical assistance to Balai Teknologi 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 second year, USAID IUWASH Tangguh will facilitate workshops to identify the capacity gap in domestic wastewater operators, discuss the need of capacity building grand design on sanitation management with the Directorate of Sanitation, continue support to LLTT and IPLT training in BTS, and support FORKALIM secretariat operational, including the ongoing twinning program for wastewater operators.

Outcome 2.2. Performance of drinking water and sanitation service providers increased

Task 2.2.1. Develop portfolio approaches to improve 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 LOP implementation, as listed in the performance work statement:

- Conduct a lesson learned exercise on the primary existing sanitation program such as LLTT, septic tank expansion through microcredit, 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

In the 2nd year of Tangguh assistance, the team will focus on:

- Finalization and publication of pocketbook LLTT and/or relevant guidelines to fecal sludge management on Tangguh website and social media
- Updating the condition of IPLT in participating local governments, assessment of functionality of the treatment units, analyses of the capacity, projection of capacity needs to achieve safely managed sanitation target of each local government, and provide recommendation in rehabilitation, and expansion, including alternative of financing. In collaboration with Objective 1, the team will offer a feasibility study to interested local governments for private participation in IPLT construction and management.
- Facilitating local government in improving the LLTT program in previous IUWASH PLUS area, and introduction of LLTT in new area of Tangguh.
- In collaboration with Objective 1 will conduct assessment of UPTD that potential to promote to BLUD, and assessment of PDAM that potential to manage wastewater business.
- Initiating collaboration between local government to share the IPLT, especially for neighboring local governments without IPLT. There are 7 LGs without IPLT, 3 of them (Kubu Raya, Kabupen Kupang, Timor Tengah Selatan) have no opportunity to share with near LG with IPLT, while the other four cities/districts (Pasuruan district, Tangerang Selatan city, Gowa district, and Simalungun district) have potential to share IPLT with nearby LG.

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 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. 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. IPLTs 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 b 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 2 includes:

- In collaboration with UNICEF will develop assessment tools on sanitation vulnerability to climate hazard as part of sanitation resilience guidelines;
- Field testing in selected areas: Pasuruan District, Kupang District, Makassar, and Semarang (UNICEF work area) Field testing of assessment tools in selected local governments

- Development of advocacy method
- Incorporate resilience of sanitation systems into local planning.

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 support the national government to monitor the progress of local governments in implementing LLTT programs to achieve the safely managed sanitation target. 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. Activities in local governments in PY1 could not be delivered as scheduled since the RKT has not been completed. All the activities carry over to PY2 as follows:

- 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 18 describes the PY2 activities, associated outputs, and timeline of Objective 2b Sanitation Sector implementation.

Exhibit 18. Objective 2b PY2 Activities and Timelines																		
SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME															
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Task 2.1.1. Apply workforce development framework to support service providers	LTTA, STTA Meeting, workshop	agreement on collaborative activity																
<ul style="list-style-type: none"> • Development of grand design of sanitation capacity building with Directorate of Sanitation, BTS, and FORKALIM 																		

Exhibit 18. Objective 2b PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME														
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<ul style="list-style-type: none"> Continue to support BTS in LLTT and IPLT design training 	LTTA Meeting	Participants pre and post test															
Task 2.2.1 Develop portfolio approaches to improving operational and financial efficiencies <ul style="list-style-type: none"> Finalization and publication of pocketbook LLTT and or relevant guidelines to fecal sludge management on Tangguh website and social media 	LTTA Meetings, workshop	Mapping of sanitation institution, IPLT															
<ul style="list-style-type: none"> Collecting and data analyses of safely managed sanitation coverage, existing operator of wastewater in LG, capacity of IPLT 	LTTA Meeting workshop	IPLT profile															
<ul style="list-style-type: none"> Promote PDAM to manage wastewater (assessment of potential PDAM) 	PO workshop	List of PDAM and CB needs available															
<ul style="list-style-type: none"> Promoting improvement of financial efficiency of potential UPTD to become BLUD (assessment of potential UPTD) 	PO workshop	List of UPTD and CB needs available															
<ul style="list-style-type: none"> Review of sanitation governance 	PO workshop	Agreed action plan by national government															
<ul style="list-style-type: none"> Develop concept of private participation in sanitation management 	workshop	PPP concept available															
Task 2.3.1 Expand menu of service model for PDAM and LG integration and adoption	LTTA workshop	Climate risk and adaptation concept in place															
<ul style="list-style-type: none"> Development of sanitation resilience tools 	LTTA	Tools available															
<ul style="list-style-type: none"> Pilot of relevant climate adaptation in local government 	LTTA Meeting workshop	Lessons learned and feedback															

Exhibit 18. Objective 2b PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME															
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Task 2.4.1. Support adoption of novel data systems by service providers <ul style="list-style-type: none"> Baseline index in local government 	LTTA Meeting, workshop	Index parameters accepted by partner	█	█	█	█	█											
<ul style="list-style-type: none"> Facilitating development of shit flow diagram as advocacy tools for achieving SMS target and basis for CWIS introduction at local government 	LTTA Meeting workshop	Shit flow diagram available	█	█	█	█	█	█	█	█	█	█						
<ul style="list-style-type: none"> In collaboration with WB to pilot CWIS assessment tools in selected cities 	LTTA Meeting workshop PO	Comprehensive sanitation planning available											█	█	█	█	█	█

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

Objective 3’s national and regional efforts combined in PY2 aim to achieve outputs and outcomes as follows: 5 WRM policies, guidance, and programs to support resilient drinking water services (IT 3-1), 2 Institutions with management information systems and/or data management tools (IT 3-2), 5 Climate vulnerability assessment reports to support improvement of raw water sources of assisted PDAM (IT 3-3), and 10 Institutions with improved capacity to assess/address climate change risks (IT 3-5). These are minimum targets, however, the team will work hard to achieve more than the PY2 targets. While there are two Outcomes left with no targets in PY2, e.g., IT 3-4 and IT 3-6, the team will carry out initial activities that are foundational for the next work planning. Overall, the entire regional activities and the national activities will contribute to achievement of the targets.

In PY2 Objective 3 will initiate activities in the regions, both in provinces and districts/cities. The focus will be on building partnerships and assessing key issues on WRM on the ground that include condition of watershed, institutional setting, threats and opportunities, and potential collaboration. As part of the assessments, the Objective 3 team will carry out Vulnerability Assessment (VA) as an important activity that will inform stakeholders of present and future condition and more importantly will be the basis for developing the plan to address climate risks.

Activities at national level will focus on continuing the partnership with KLHK, particularly Directorate of Inland Water and Mangrove Rehabilitation to ensure that implementation of the workplan is in alignment with and contribute to the directorate’s mandate and plan. The team will expand potential collaboration particularly with other ministries, e.g., Kemendes on the ministry’s program to address WRM issues in the village’s Dana Desa (Village Fund), Kemendagri (Ministry of Home Affairs) on disaster management at province and district/city level that may impact

functionality of the PDAM or water supply, and BMKG (Meteorological, Climatology, and Geophysics Agency) on provision of climate data and information including projections.

Identification and selection of watershed/catchment areas is based on the sources of raw water used by PDAMs. Criteria for selection will include, among others; 1.) raw water type and locations that are important to PDAMs, e.g., serving many customers, 2.) repeated/frequent hydrometeorological events, e.g., flooding at raw water intake facility, 3.) different types of raw water sources across USAID IUWASH Tangguh’s assisted PDAMs so that there are models for spring, surface water, and ground water/well, and 4.) commitment from PDAMs that the work for the raw water intake facility (VA, action plan, etc.) will be used by the PDAM as a reference for their planning and budgeting.

Locations providing raw water to PDAMs will be the basis for delineating the catchment/recharge area. The assessment will include topography, hydrology, geology, and hydrogeology aspects, identification of government agencies and other stakeholders in charge, and identification of communities living in and depending on the catchment/recharge area. The delineation work will use GIS (geographic information system). Data will be presented in spatial format, e.g., vulnerability maps of watershed that will affect the availability of water resources (capacity and quality). The vulnerability maps will present the watershed broadly that may cover several jurisdictions including all major water users in it, e.g., irrigation, industry, commercial, and other off-takers. As for specific PDAM, the vulnerability assessment will present more detailed data and analysis that use down-scaled climate projection. The vulnerability assessment will be the main basis from which to develop the adaptation plan to ensure and improve the availability of water resources (surface water, ground water and spring water) as PDAM’s raw water. Following is a flow diagram showing major steps in building Climate Resilient Water Resource Management.

Exhibit 19. Framework of Building Climate Resilient Water Resource Management



To have a more focused identification on WRM issues, USAID IUWASH Tangguh will hold a workshop with participation of WRM stakeholders in provinces and districts/cities. The workshop is important, not only as a follow up of the regional socialization held in Q4 PY1, but also to build targeted partnerships across WRM stakeholders and identify data and information that are important to complement planning rationale for related Tasks, e.g., USAID IUWASH Tangguh will explore and collect information from the workshop participants in charge and/or active in WRM issues to better shape planning for Task 3.2.1 Establish or strengthen inclusive WRM committees

including local government, private sector, communities, and utilities. The workshop will also act as a trigger to commence the stakeholders' annual work plan-RKT (*Rencana Kerja Tahunan*) that serves as a joint plan with commitment and resource sharing from stakeholders, particularly local government.

3.4.1. PARTNER COLLABORATION

The collaboration will target key government agencies and other stakeholders in charge of management of springs, surface water, groundwater, landscapes (forested and non-forested area), land management agency, and other related institutions and organizations who are key in WRM programming more broadly. The partnership at the province and city/district level will be developed based on the context and roles of potential partners on the ground. At the national level, the partnership will focus on the Directorate of Inland Water and Mangrove Rehabilitation, KLHK. In parallel, USAID IUWASH Tangguh will also build collaboration with other national stakeholders.

Exhibit 20. Objective 3 Key Partners

Partner	The activity
Ministry of Environment and Forestry (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
Ministry of Villages, Development of Disadvantaged Regions	Joint program on WRM study, implementation, and monitoring WRM conservation program, etc.
Ministry of Energy and Minerals Resources	Joint program on WRM study, implementation, and monitoring on groundwater (quantity and quality), conservation program, etc.
Ministry of Home Affairs	Joint program on WRM study, implementation, and monitoring of WRM conservation program, etc.
Meteorological, Climatology, and Geophysics Agency (BMKG)	Data sharing on climate projection, collaboration in climate & weather data dissemination
Water utility/PDAM	Joint activities on climate change vulnerability assessments, action planning, and implementation of climate adaptation actions, as well as its monitoring-evaluation
Perum Jasa Tirta	Joint programming and implementation aimed at provision and protection of surface water
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
Community and village empowerment agency	Joint programming on community-based protection of watershed/catchment area
BP DAS HL (Watershed and Protected Forest Management Office)	Joint programming and implementation of catchment area rehabilitation and protection
Universities	Development of the climate change vulnerability assessments, advocacy to local government, water quality and quantity monitoring, capacity development activities
Private sector	Joint programming on watershed and water resource protection through CSR and/or CSV
Community groups/CSO	Building awareness and community-based activities broadly, e.g., watershed & water resource protection, dissemination of weather and climate information

3.4.2. ACTIVITY INTEGRATION

The integration of Objective 3 with the other Objectives includes ensuring climate resilience WRM is considered in tools such as the PDAM Index, Sanitation Index, and Government Index (Godex). For instance, provision of regulations on WRM is part of the revised Godex (Note: the original Godex was developed under USAID IUWASH PLUS). Therefore, the current condition and progress towards improvements of WRM are identified and recorded since early PY2.

To identify opportunities for funding and improving governance, the Objective 3 team will work with the Objective 1 team. At the local government level, the team will work with Bappeda to identify which local government agencies have roles in WRM and what type of plan and activities are currently being implemented. While USAID IUWASH Tangguh will carry out vulnerability assessments, the results will inform and be the basis for advocacy to strengthen the WRM planning of local government agencies.

Another integration is between Objective 3 and Objective 2a (Water). In addition to the PDAM Index, the integration will also include the programming, specifically on RPAM (Water Safety Plan) and vulnerability assessment-action planning (VAAP) for PDAMs. Planning and implementation of the two activities will be initiated in the same PDAM(s) in district/city. Implementation of VAAP will not be carried out in all PDAMs in PY2, but instead be carried out in phases. In PY2, the Objective 3 team will target 5 VAAPs minimum. The 5 VAAPs will also be the locations of RPAM.

With Objective 2b, Sanitation, the Objective 3 team will share climate hazard data and information, e.g., climate projections, so that sanitation programming will be able to identify what is needed to address climate risks. Furthermore, an action plan as a response may be jointly developed where target audiences of WRM and sanitation include the same partners such as the local government development planning agency Bappeda.

With the Objective 4 team, the Objective 3 team will integrate the GESI consideration into related tasks on Objective 3, e.g., during identification and implementation of works at community level at the watershed for conservation efforts. Another area of integration of GESI is on awareness raising and training programming so that women, disabled, youth, marginalized group in the community will have the same opportunity to voice their concerns and expectations toward a better WRM.

3.4.3. TASK BY TASK DETAILED DESCRIPTION

As the RKTs will be developed at the district/city and province, the Objective 3 team will start to implement activities on the ground that focus on building partnerships with various partners and stakeholders. During the regional socialization, a number of key stakeholders were present. IUWASH Tangguh will engage them moving forward while engaging other partners and stakeholders. For instance, during regional socialization in Central Java, PT Jasa Tirta I showed interest in data sharing. The data will be important when USAID IUWASH Tangguh develops the vulnerability assessment.

Outcome 3.1. Improved water quality, quantity, and reliability in watersheds which supply raw water 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

In PY2 USAID IUWASH Tangguh will carry out awareness raising activities to obtain common understanding of the current situation of WRM, particularly related to its function to provide sustainable raw water for water supply, threats that are caused by climate and land use change—thus increasing runoff, and pollution, either from domestic, agriculture/farm, and industry. The awareness raising is also to identify potential solutions that each party may take as per their respective roles.

To reach out to different target audiences, USAID IUWASH Tangguh will carry out the awareness raising activities in phases. At the province and district/city, USAID IUWASH Tangguh will start by holding a series of stakeholder consultations to initiate collaboration as well as to obtain information on the current level of awareness regarding the current condition of water resources, watershed, threats, opportunities, and potential actions that would need involvement of related stakeholders. From this, the team will develop specific activities for targeted audiences. For local government agencies, the focus will be on strengthening the resilience of local governments by helping them to understand the numerous impacts climate change will have on water availability throughout catchments. For communities, the focus will be on their daily practice to help conserve watersheds. USAID IUWASH Tangguh will discuss a range of topics for water utility PDAM as they are the most concerned with the availability and sustainability of WRM in providing raw water.

The consultation will also identify data and information that will be used to develop plans for Task 4.1.1. Develop SBC strategies targeted to sustainable sanitation systems and 4.2.2. Engage different media channels, influencers, and content providers. To achieve this, the awareness raising programming will be developed in consultation with the Objective 4 team.

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 PY2 USAID IUWASH Tangguh will work on the ground to identify critical natural assets that supply raw water to PDAMs initially through 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. In parallel, IUWASH Tangguh will work with related agencies to get down-scaled climate projections that will be used as the basis for identifying climate hazards, e.g., changes in temperature, consecutive dry days, and rainfall. USAID IUWASH Tangguh will introduce the use of mWater application during this exercise, e.g., inputting data of critical assets prone to climate risks that include co-ordinates/geo-location, capacity, condition, results of raw water quality testing.

Delineation and mapping of watersheds and climate projections will be the basis to develop an action plan that provides options for intervention. Selection of the intervention will be aligned with PDAMs and other stakeholder's commitment and availability of resources. The action plan will be integrated into PDAM's and other related stakeholders' planning cycle, e.g., annual and/or mid-term year planning.

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

In PY2 USAID IUWASH Tangguh will start to identify potential funding for WRM activities. As such USAID IUWASH Tangguh will seek this opportunity by referring to the USAID private sector landscape assessment and past collaboration with private corporations such as Coca-Cola, Nestle, and Cargill being implemented under IUWASH PLUS and APIK. In addition, USAID IUWASH Tangguh will also map potential collaboration with other corporations, either through business associations or directly with potential corporations through roadshows.

At the provincial level, USAID IUWASH Tangguh will consult with the local government agency in charge of collaboration with private entities. Typically, this is under the Cooperation Division of the Regional Secretary that works with and coordinates the CSR Forum. To build understanding of the current condition, problems, and potential solutions on improved WRM, USAID IUWASH Tangguh will develop communication materials with practical and easy to understand content and context.

USAID IUWASH Tangguh will also seek more comprehensive funding for WRM, particularly from GCF (Green Climate Fund). As such, USAID IUWASH Tangguh will consult with provincial Bappeda to ensure their interest, identify potential projects, and commitment and resources to tap into the GCF funding opportunity. USAID IUWASH Tangguh will in parallel consult with the *Badan Kebijakan Fiskal* (Fiscal Policy Agency) under the Ministry of Finance to get updates on calls for proposal cycle, portfolio for funding, preferred proponent, and other key information so that USAID IUWASH Tangguh's efforts will be more specific.

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 PY2 USAID IUWASH Tangguh's efforts will work on building enabling conditions and readiness that lead to implementation of watershed protection measures. The vulnerability assessments (VA) under Task 3.1.2 will be used as the main reference in terms of development options for implementation on WRM protection. While the assessment is being developed, USAID IUWASH Tangguh will in parallel work with and support partners in planning and implementation of WRM activities. Development of VA will use data and information that can also be used to strengthen the planning of related partners. For instance, USAID IUWASH Tangguh has identified that PT Jasa Tirta is interested in a collaboration on water resources improvements. A joint activity will include works at community level in the upstream of watersheds for community-based conservation efforts. The activities will start with identifying communities living upstream, building their awareness on the importance of watershed protection, and piloting activities. Success of this intervention will be part of the team's advocacy for replication in broader locations.

Likewise, USAID IUWASH Tangguh will also carry out a similar approach when engaging the private sector. While more targeted watershed conservation will need completion of the vulnerability assessment, the team will identify and support private corporations that are implementing initiatives that address environmental issues, particularly those related to watershed protection.

When the vulnerability assessment is completed, USAID IUWASH Tangguh will use the action plan and the stakeholders' commitment gained throughout the participatory process as the key element for advocacy, specifically to be integrated into the planning and budgeting processes. USAID IUWASH Tangguh will ensure that implementation of measures is as per the action plan and with

good quality results. That way it is expected that measures for watershed protection will be regularly planned and budgeted annually.

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

In PY2 USAID IUWASH Tangguh will start building capacity of the local workforce that includes staff of the water utility PDAM, related local government agencies, CSO, and other partners. The content will mainly focus on practical watershed management and protection. This will be carried out in phases that include training needs assessment, developing training materials, trialing the training using the training materials developed, training of trainers, and training activities for various target audiences.

Topics of the training will include, among others: watershed management and protection, weather, climate, climate change, climate hazards, geology, geohydrology, hydrology, hydrological cycle, engaging community, and integrating climate hazard/risk into planning. Training will be tailored based on results of the training needs assessment.

It is important that local partners and actors have the knowhow even beyond USAID IUWASH Tangguh as a project. As such, USAID IUWASH Tangguh sees that universities are the best fit to gain the knowledge from USAID IUWASH Tangguh and be the pool of expertise for future needs for training. USAID IUWASH Tangguh will then engage local universities either during the training needs assessment, development of training materials, ToT, and training activities. It is expected that the ToT will create a pool of trainers knowledgeable of watershed protection on the ground. In addition, USAID IUWASH Tangguh will identify the needs for certification of the trainers.

Outcome 3.2. Increased accountability and equity in WRM and climate-resilient WASH regulatory and management arrangements

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

To have effective watershed management and protection, a platform for communication and coordination of stakeholders is needed. USAID IUWASH Tangguh will establish a new committee or strengthen the existing WRM committee so the WRM issues may be better identified and tackled. As such, USAID IUWASH Tangguh will carry out stakeholder consultations to identify existing WRM committee, what is being planned and implemented, and what is needed to be improved. USAID IUWASH Tangguh will encourage collaboration through joint planning among related actors. The collaboration will focus on how WRM programming will contribute 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.

To make the committee effective, USAID IUWASH Tangguh will also provide training activities. This is also part of Task 3.1.5 where the committee members will be the target beneficiaries of a training program. The training aims to build capacity of the committee members, particularly in terms of technical concept and practice on watershed management and protection.

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

Integration of the GESI into WRM programming is not only part of providing equal opportunities across social grouping, but will also be key to building sustainability. USAID IUWASH Tangguh will provide trainings program on GESI for water utility PDAM, government officials, and other related stakeholders such as PT Jasa Tirta. 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. USAID IUWASH Tangguh, under coordination of Objective 4, will work with the Ministry of Women’s Empowerment and Child Protection on aligning USAID IUWASH Tangguh approach with national guidance. At province and district/city level, USAID IUWASH Tangguh will work with related government agencies, e.g., *Dinas Pemberdayaan Perempuan* (Office of Women’s Empowerment).

Throughout the GESI integration programming, the Objective 3 team will work with the Objective 4 team particularly on WRM technical issues and building partnership with WRM stakeholders in provinces, districts/cities, water utility PDAMs, and community. The team will also conduct monitoring-evaluation activities to see effectiveness of the awareness raising programs and identify area for improvements that will be important for follow up activities.

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 work on identifying, developing, and providing data and information on water supply and water resources that are important and useful for the public. Access to such data and information will improve planning and decision making as well as a being reference for daily practice of the public and also operation of water utility PDAMs in case, for example, they need to be more efficient in using water if BMKG issues a prediction of long drought due to El Nino. For instance, being informed of a potential disturbance due to flooding will help operators improve the pumping system of a PDAM’s distribution piping network to better manage resulting turbidity. Another example is if PDAM is anticipating a long drought that will force PDAM to shorten its service duration in a day, the PDAM can inform their customers to store water for their daily needs and customers need to use water more efficiently.

USAID IUWASH Tangguh will work with PDAM, WRM operators, BMKG, and other agencies that are in charge of production and dissemination of data and information. USAID IUWASH Tangguh will work with these agencies to identify data and information that are available and can be shared publicly. Furthermore, the mode of dissemination will be identified and developed jointly by BMKG, WRM operator, and PDAM with support of USAID IUWASH Tangguh.

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

Climate data and information are important both for planning purposes, operation of water resource infrastructure and water supply system. USAID IUWASH Tangguh will work with river management, watershed management, and water utility to identify their needs on weather and climate data and

information. In parallel, USAID IUWASH Tangguh will work with and support BMKG to develop the required data and information.

In addition, USAID IUWASH Tangguh will work with BMKG to provide training on how river management agency, watershed agency, and PDAM can access and understand the weather and climate data and information that are produced by BMKG. For specific purpose, e.g., updates of weather data and information, USAID IUWASH Tangguh will identify water utility PDAM that needs real time weather data and jointly with PDAM and BMKG develop a tool or platform to provide such data. The options may include a climate and weather information system (CWIS) display installed in the PDAM control room. Identification of the PDAM that needs such a CWIS will be carried out jointly with the Objective 2a team.

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

As part of building PDAM resilience, specifically being more responsive to hazards, e.g., if/when there is fluctuation of raw water capacity and its quality, PDAM will need to have a reliable monitoring of their raw water facilities. The monitoring system includes a set of monitoring equipment, functioning monitoring (software) system, skilled operator, and data recording and analysis. USAID IUWASH Tangguh will work with PDAM to identify types and locations of raw water used by PDAM, how groundwater and surface water monitoring are in place/will be developed and how it will be integrated into PDAM's production facility operation.

USAID IUWASH Tangguh will engage local communities, particularly youth, to support the monitoring of raw water used by PDAM. USAID IUWASH Tangguh will also seek collaboration with local university to develop a low-cost water quality testing kit to be part of the monitoring system that can be operated by community or youth.

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

Identification and selection of the community members to become citizen scientists will be based on their location in the delineated 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 low for a long period during the dry season, then they need to proactively anticipate actions 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.

In PY2, USAID IUWASH Tangguh will engage local community on the ground in water resources protection. Local community will serve as an addition of stakeholders' participation in this effort, taking into account that many communities live in and depend on the watershed upstream. USAID IUWASH Tangguh will research community participation in WRM that includes who from the community should be engaged (local leader, youth, cadre, women), how they are engaged, what USAID IUWASH Tangguh could support, and what results should be achieved. USAID IUWASH Tangguh will seek the use of mWater application for these tasks, e.g., capturing data on location of community/village, location of water monitoring, location of community action, etc.

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 watershed-level WRM

As an effort to have effective water resource governance and management, USAID IUWASH Tangguh will carry out analysis of existing policy and regulation, identifying gaps and overlaps, if any. It is vital that there must be an effective, complete, and functioning policy and regulation for a sustainable WRM. USAID IUWASH Tangguh will engage local experts familiar with technical-substantive issues as well as regulatory and institutional issues. For this, in PY2 USAID IUWASH Tangguh will collaborate with local universities and/or other research institutes. The collaboration will also identify recommendations needed to address the problems identified for streamlining approaches to WRM.

USAID IUWASH Tangguh will also consult with stakeholders to obtain their input and consent that are important for improvements on WRM policy and regulation. This will be transformative as the improved WRM policy and regulation will lead to improvements of sustainable provision of raw water for WASH.

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

In PY2, USAID IUWASH Tangguh will carry out activities to raise awareness of related local government agencies, watershed agency, and water resource agency and communities on WRM policy and regulation, particularly in the face of climate change that will pose a threat for sustainability of water resources. In cases where a watershed is located across several jurisdictions, USAID IUWASH Tangguh will advocate related stakeholders that mutual actions are needed. For instance, protection of a watershed upstream may contribute to a sustainable water resource downstream. As such, USAID IUWASH Tangguh will work first with local universities and experts to identify potential payment for environmental services (PES). Throughout the identification and development of the PES, USAID IUWASH Tangguh will consult with local government and other authorities in charge of watershed to inform them of the potential PES scheme and encourage their commitment.

USAID IUWASH Tangguh will also support and encourage a cross boundary collaboration as a formal requirement so as it can be referred to for planning, budgeting, and implementation on WRM activities in respective jurisdiction. USAID IUWASH Tangguh will ensure that implementation is effective as planned by encouraging monitoring-evaluation and share the results to related local government agencies.

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

To institutionalize climate resilient WRM issues, in PY2 USAID IUWASH Tangguh will start to tap into the planning and budgeting process, particularly midterm (e.g., RPJMD) or annual. As such, the USAID IUWASH Tangguh team will consult with Bappeda to identify local government agencies that have roles in WRM. Taking into account that watershed is often located in districts, not really in cities, the team sees that *Dinas Lingkungan Hidup* (district's environment office) has roles in environment issues. In certain districts where watershed is characterized by plantations, the team

sees that it will be important to include *Dinas Perkebunan* (district’s estate plantation agency) as a potential partner. At provincial level, the team will work with *Dinas Kehutanan* (forest service) and *Dinas Pengelolaan Sumber Daya Air* (water resource management service) as they are in charge of watershed and water resources respectively and they have roles in cross boundary issues.

In parallel, the team will also tap into the planning and budgeting process, both at district and provincial levels. While in Q1 of PY2 the Gol planning and budgeting are already underway as per the Gol fiscal year, e.g., *Musrenbang*, *Forum SKPD*, the team will focus on obtaining information and identifying what is being planned for WRM and engaging related agencies that USAID IUWASH Tangguh will support to improve the planning, e.g., by providing additional data and analysis as reference. The existing plan and budget will be the basis for “the baseline” that USAID IUWASH Tangguh will consider for the Godex (Government Index) and an area for advocacy moving forward.

At the village level, the team will take a similar approach in integrating WRM issues into village planning and budgeting. This effort will start after the team has identified locations of villages in the upper watershed for community engagement in watershed protection and improvements.

In PY2 USAID IUWASH Tangguh will tap into existing planning and budgeting processes to identify activities on water resource and watershed protection. This information will serve as a baseline and the basis for planning and budget advocacy going forward. For this, the team will from time to time monitor through DPA (Budget Implementation Document)) in each administration and carry out field monitoring to see effectiveness of the implementation on the ground and identify areas for improvements that further will be used as a reference for the budget advocacy.

Activities for Year 2, including associated outputs, and implementation timelines are presented in the exhibit below.

Exhibit 21. Objective 3 PY2 Activities and Timelines														
SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME											
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
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														
- Series of stakeholders’ consultation (KLHK, PSDA, Dit. AM)	LTTA, event	Awareness on importance of sustainable WRM for water supply services												

Exhibit 21. Objective 3 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME												
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR 3
		in the face of climate change													
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															
- Meetings with KLHK on VA	LTTA, events	Input for methodology and plan for VA													
- KLHK’s participation in workshops on VA process	LTTA, events	Input for VA and recognition of KLHK on the VA													
- Meetings with BMKG & related agencies	LTTA, events	Downscaled climate projections & identification for collaboration for WRM tools development													
- Introduction & use of mWater to capture VA’s data & information	LTTA, subcontract (Solstice)	Data inputted into mWater													
Task 3.1.3 – Promote private sector investment into WRM activities to protect natural assets and invest in green infrastructure															

Exhibit 21. Objective 3 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME													
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR 3	
- Develop private sector funding identification by assessing the USAID private sector landscape assessment	LTTA (with Objective 1)	Identified private sector funding														
- Development of materials for roadshow to private sector	LTTA (with Communication Team), printed materials	Information sheet/fliers														
- Roadshow to business association	LTTA	Identification of potential collaboration (CSR and/or CSV)														
- Meetings with GCF	LTTA (with Objective 1)	Identified potential funding														
- Meetings with BPDH	LTTA (with Objective 1)	Identified potential funding														
Task 3.1.4 – Implement and manage protection measures for watershed catchment areas to conserve biodiversity and water sources and improve sustainable water services																
- Meetings with KLHK, other ministries, and private sector (intermittent, depending on opportunity)	LTTA	Identification and plan for collaboration, e.g., community-based activity														
Task 3.1.5 – Build capacity of local workforce to carry out watershed																

Exhibit 21. Objective 3 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME												
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR 3
management activities such as construction of infiltration wells, improved sloping and management															
- Training needs assessment (TNA)	LTTA, PO/STTA (travel, interview)	TNA developed													
- Development of trainings modules	PO/STTA	Training modules													
- Trialing of the training	PO/STTA	Pilot training conducted													
Task 3.2.1 Establish or strengthen inclusive WRM committees including local government, private sector, communities, and utilities															
- Stakeholders consultation (with KLHK, PSDA)	LTTA, events (with other Objectives Teams)	- Identification of WRM committee and related issues, e.g., segregation of roles - Draft platform for coordination/ communication													
- Training for WRM committee	LTTA, PO (jointly packaged with Task 3.1.5 and in collaboration with Objective 4)	WRM committee trained on various issues (topics will be based on the TNA)													
Task 3.2.2 Provide awareness-raising and training for government officials and															

Exhibit 21. Objective 3 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME												
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR 3
WRM stakeholders on gender equity and inclusion, including gender-responsive budgeting															
- Consultation with Min. of Women's Empowerment	LTTA (with Objective 4)	Alignment of USAID IUWASH Tangguh's concept, approach, & plan with national guidance													
Task 3.2.3 Ensure that relevant WRM information and data are publicly available, including production from springs and water usage statistics															
- Meetings with WRM agencies and BMKG	LTTA, events	Identification and collection of WRM & climate data/information													
Task 3.3.1 In partnership with BMKG improve quality and accessibility of climate information and promote applied messaging for WRM decision makers															
- Meetings with BMKG (several meetings intermittently)	LTTA, events, STTA/PO	Identification of dissemination mode of weather and climate data/information													

Exhibit 21. Objective 3 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME													
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR 3	
- Development on packaging WRM data/information	LTTA, events, STTA/PO	Draft type and mode of dissemination of WRM data/information														
Task 3.3.2 Provide PDAMs with a real-time groundwater and surface water monitoring information system																
- Consultation meetings with KLHK and ESDM on water monitoring	LTTA, event	Identification of existing monitoring systems and needs for improvements/expansion of monitoring														
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																
- Consultation meetings with KLHK, PSDA, and ESDM	LTTA, events	Identification of community potentially engaged in monitoring														
Task 3.4.1 Conduct gap analysis in policies and regulations for improved watershed-level WRM																
- Meetings with WRM stakeholders	LTTA, event	Identification of existing policy and regulation														

Exhibit 21. Objective 3 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME													
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR 3	
- Drafting recommendation for streamlining policy	LTTA, STTA	Draft findings and recommendation on WRM policy and regulation														
Task 3.4.2 Strengthen the enabling environment for watershed management and improve WRM capacity for upstream and downstream users																
- Meetings with KLHK, PSDA, ESDM, and other stakeholders	LTTA, event	Awareness of stakeholders and community on WRM policy and regulation														
- Roadshow to WRM stakeholders	LTTA, meetings	Identification of potential PES														
Task 3.4.3 Ensure that climate-resilient WRM is integrated into government plans and budgets at all levels																
- Series of meetings with national stakeholders	LTTA, event	Identification of WRM government agencies on their planning and budgeting														
- Follow meetings with KLHK and other national partners	LTTA, event	Identification of current WRM and/or watershed rehabilitation budgeting														

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 improved water quality to assure the availability of clean water.

Under Objective 4, USAID IUWASH Tangguh will increase the adoption of behaviors promote safely managed drinking water and safely managed sanitation and improve women's participation and ascension into leadership roles by combining SBC activities and GESI approaches. The team will build on the "Tetangga Panutan" message from previous USAID WASH initiative by also incorporating new focal areas like WRM and climate change.

The major activities under Objective 4—community engagement, media engagement, and media and social media advocacy—will be designed to increase general knowledge of WASH and WRM vulnerability; promote awareness of financing opportunities; 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 importance of WASH and WRM sectors; ensure that 30% of households in target areas 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.

The implementation of PY2 will focus on conducting formative research that informs the development of and SBC strategy and key messages, as well as hotspot selection. Following completion of the strategy and hotspot targeting, USAID IUWASH Tangguh will launch community entry with a focus on capacity building and advocacy work to facilitate community involvement in the MUSRENBANG process; and kicking off an SBC campaign in collaboration with the Ministry of Health (MOH), Ministry of Communication and Information Technology (MCIT), Ministry of Administrative and Bureaucratic Reform (MABR), and both national and local media. Also at the national level, the Objective 4 team will support MOH efforts to promote handwashing with soap (HWWS), launch urban community-based sanitation (STBM) guidelines and contribute, with AKKOPSI, to advocacy for "*Bunda Sanitasi*" as the champion to promote hygiene behavior and safely managed water and sanitation.

Additionally, the project team will engage partners to mainstream GESI through awareness raising, capacity building and the development of gender responsive budgeting and planning (GRBP), again building from previous USAID WASH programs. The specific activities to accelerate GESI integration into program implementation are detailed under the section on GESI programming below.

3.5.1. PARTNER COLLABORATION

The USAID IUWASH Tangguh Objective 4 team will work closely with partners at national and local levels, including Bappenas, the MOH, Ministry of Women Empowerment and Child Protection (MWECP), MABR, Ministry of Environment and Forestry (MOEF), MCIT, and the Ministry of Public Works and Housing (MPWH). The national government will provide support and endorsement while provincial 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 communication work and to lead national campaigns for WASH and WRM.

In the exhibit below, we identify key institutional partnership necessary to the implementation of activities under Objective 4 in PY2.

Exhibit 22. Objective 4 Key Partners	
Partner	The activity
Bappenas	Close coordination to receive input for SBC, endorsement to mainstream into WASH and WRM sectors, endorsement for community involvement on the Musrenbang process, and collaboration to a conduct willingness to connect to services study
MOH	Collaboration to receive input and endorsement for the SBC Strategy and Action Plan, and Broadcast <i>Tetangga Panutan</i> , advocating “Bunda Sanitasi” as the driver to promote behavior change and WASH and WRM campaign, implementation of participatory assessment and triggering
MABR	Engage with MABR to continue review potential communication channels, broadcast information with regards WASH and WRM
MCIT	Engage with MCIT to review potential communication channels, and collaboration to develop WASH and WRM content and to conduct WASH and WRM promotion
MWECP	Collaboration to mainstream GESI into WASH and WRM sectors and the process of developing mainstreaming guideline
MOEF	Engage with MWECP to obtain endorsement for WRM campaign
Provincial Health Office	Coordination and collaboration to support and enrich SBC program implementation
District/City Health Office	Close collaboration to select hotspot locations 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 Indonesia, SNV, SIMAVI, YPCII, Water.Org, UNICEF, DFAT, Yayasan KEHATI, USAID SEGAR etc.
Media, influencers	Engage with national media and social media influencers to promote WASH and WRM

3.5.2. ACTIVITY INTEGRATION

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

- Objective 4 will support Objective 1 to build sector capacities and create/expand mechanisms to promote social accountability and inclusivity, and monitoring of the inclusive Governance Index.
- The support for Objective 2 includes inputs into a workforce development framework for service providers; a marketing strategy and expansion of WASH service models through a

consultation process with communities; and monitoring of indices (PDAM index and Sanitation index).

- 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 study of willingness to connect to water and sanitation services.

Objective 1, Objective 2 and Objective 3 will support hotspot selection by providing technical data related to potential household connections 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

Outcome 4.1. Latrine use, maintenance, and desludging behaviors adopted and become social regulated norms

Task 4.1.1. Develop SBC strategies targeted to sustainable sanitation systems

Understanding that SBC is an important tool in efforts to promote improvement of WASH and WRM practices—especially for increasing latrine use, maintenance, and desludging behaviors—USAID IUWASH Tangguh will develop an SBC strategy in PY2 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 PY2, USAID IUWASH Tangguh Objective 4 will work closely with MOH to conduct formative research and to continue gathering input for the SBC strategy. Informed by the research, USAID IUWASH PLUS will continue consultation with other ministries, such as MOEF, for the development of key messages to support WRM promotion and other ministries to receive support and collaboration in conducting advocacy communication work to increase awareness of WASH and WRM. Later in PY2, USAID IUWASH Tangguh, in collaboration with MOH and MOEF, will conduct dissemination of the SBC strategy.

Objective 4 will also be strategic early in PY2 in seizing opportunities to promote SBC around sanitation in collaboration with other donors (DFAT, World Bank) and development programs (UNICEF, WHO, WVI, Plan Indonesia, etc.) in parallel to longer-term research and planning efforts.

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.

During PY2 implementation, USAID IUWASH Tangguh Objective 4 will continue to 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, to confirm potential hotspot locations. 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 and implement the SBC activities.

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 PY2 USAID IUWASH Tangguh will continue 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 1 to facilitate the collaboration among the entrepreneurs and MFIs, and with Objective 2 to encourage the development of inclusive WASH facilities.

Outcome 4.2. Payment for equitable and accountable water and sanitation services becomes the social norm

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 households' willingness to invest in 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. During PY2, USAID IUWASH Tangguh will continue explore possible sub-messages for payment and explore key message for WRM initiatives. To develop the campaign around WRM, USAID IUWASH Tangguh will engage upstream LGs and partners; assess WRM conditions to understand the context and issues to be mobilized under the campaign; and develop key and strengthen key messages through consultation with MOEF, MOH, and other related stakeholders.

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 includes defining the message, pre-testing and finalization of the materials.

In the meantime, 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 neglected. USAID IUWASH Tangguh will support PDAM and wastewater operator development of marketing strategies focused on customer engagement. In PY2, USAID IUWASH Tangguh will continue assessing the existing capacity of water and sanitation operators, develop the capacity building program, create market maps and the development of marketing strategies for water and sanitation operators.

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. In PY2, USAID IUWASH Tangguh will also collaborate with media to conduct media advocacy, and to facilitate the establishment of citizen journalism activities to increase awareness of WASH and WRM.

Outcome 4.3. Institutional prioritization, commitment, and participation in WASH and WRM sector improvements, including for poor-inclusive and data-driven decision making, increased

Task 4.3.1. 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, USAID IUWASH Tangguh will implement specific activities that are presented in the GESI programming section.

Activities for Year 2, including associated outputs and implementation timelines, are presented in exhibit 23 below.

Exhibit 23. Objective 4 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME												
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR 3 (CONT' D)
Task 4.1.1 Develop SBC strategies targeted to sustainable sanitation systems															
• Formative Research	FGD, KII	Formative Research Report													
• Development of key message and SBC strategy	Workshop, FGDs and meetings	SBC Strategy document													
• Dissemination of SBC Strategy	workshop	Dissemination reports													
Task 4.1.2 Increase Household Demand for WASH Services															
• Inclusive rapid assessment	FGD, meetings	Inclusive rapid assessment reports													
• Community entry and conducting inclusive participatory assessment	Training, FGD, meetings	Participatory Assessment documents (WASH and social map, reports)													
• Development of inclusive community working plan	Workshop, FGD, meeting	Inclusive community action plan													
• Support MoH for Urban STBM	Training, meeting, event (including)	Activity reports													

Exhibit 23. Objective 4 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME												
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR 3 (CONT' D)
Implementation	Launching guideline of urban STBM														
• HWWS Promotion	Training, FGD, meeting, event	Activity reports													
Task 4.2.1 Develop an SBC campaign for payment for water and sanitation services															
• Development of marketing and promotion strategy to improve WASH services	Workshop, FGD, meeting	Marketing and Promotion Strategy document													
• Development of Tetangga Panutan sub messages for payment for water and sanitation services	Workshop, FGD, meeting, PO	Activity reports													
• Development of SBC materials	Workshop, training, meeting, FGD, PO	SBC materials													
• Development of marketing and promotion materials	PO	Marketing and promotion materials													

Exhibit 23. Objective 4 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME															
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR 3 (CONT' D)			
<ul style="list-style-type: none"> Campaign to promote HWWS, WASH and WRM 	PO, training, FGD, meeting, event	Activity report																
Task 4.2.2																		
Engage different media channels, influencers, and content providers																		
<ul style="list-style-type: none"> Assessment to identify local media channel, influencers, and content providers 	FGD, meeting	Activity report																
<ul style="list-style-type: none"> Development of collaborative content to promote HWWS, WASH and WRM 	Workshop, FGD, meeting	Activity report																
<ul style="list-style-type: none"> Media advocacy 	Training, workshop, FGD, Field Visit, Event	Media report, Media Publication, Social Media Content																
<ul style="list-style-type: none"> Citizen Journalism 	Training, workshop, FGD, event, field visit	Social media content																

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 and other vulnerable groups' involvement in the decision-making regarding WASH and WRM issues. USAID IUWASH Tangguh will also improve capacity of female workers in the water and sanitation sectors. The team will monitor participation and capacity of female WASH sector workers and GESI-inclusive service provision through the Government Index, PDAM Index, and Sanitation Index, while the GRBP will be monitored through APBD tracking tool.

To ensure that the GRBP represents the needs of women and other vulnerable groups, USAID IUWASH Tangguh will work closely to build the capacity of Gender Mainstreaming Working groups to ensure the involvement of water and sanitation operators in the working group and serve as gender focal points.

At the community level, USAID IUWASH Tangguh will execute a participatory approach that provides opportunities for women and other vulnerable groups to raise their voice and actively be involved in planning and decision making regarding the development of community action plans and the MUSRENBANG process and other efforts to improve WASH and WRM conditions. Furthermore, USAID IUWASH Tangguh will encourage male participation in activities related to hygiene promotion.

Finally, the team will build on the project's Gender Analysis Report and Gender and Inclusive Action Plan, which was submitted and approved in compliance with Section F.5.7 of our contract in PY1, treating the Plan as a living document. The team will make additional submissions on an as needed basis.

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 mainstream GESI into WASH and WRM sectors. USAID IUWASH Tangguh will also work with BAPPENAS, MOH, MPWH and the MOEF to develop gender profiles in WASH and WRM sectors and conduct gender analysis related to climate resilience. Specifically, with MOH, USAID IUWASH Tangguh will provide continuous support for the STBM in urban communities and ensure GESI mainstreaming at the implementation level.

In PY2, USAID IUWASH Tangguh will engage other donors and development programs, including FORKALIM (association of wastewater operators) and PERPAMSI (association of PDAM) to mainstream GESI both through development of guidelines and through capacity building for the members of FORKALIM and PERPAMSI.

The exhibit below presents key partners and their roles.

Exhibit 24. Gender Programming Key Partners	
Partner	The activity
BAPPENAS	Coordination and endorsement to mainstream GESI into WASH and WRM sectors
MWECP	Collaboration to mainstream GESI into WASH and WRM sectors and the process of developing mainstreaming guideline
MOH	Update implementation of inclusive STBM
Ministry of Environment and Forestry	Collaboration to mainstream GESI into WRM sector and the process of developing mainstreaming guideline, and gender analysis with regards to climate resilience
Ministry of Public Works and Housing	Collaboration to mainstream GESI into WASH sector and the process of developing mainstreaming guidelines
FORKALIM and PERPAMSI	GESI assessment to portrait gender roles on water and wastewater management operator, capacity building for members of FORKALIM and PERPAMSI
Donors, NGOs, and development programs	Engage with other development programs to integrate GESI into WASH and WRM sectors. 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 1 will support GESI programming by advocating, 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 towards gender mainstreaming through the government index (Godex), Sanitation Index (Sandex) and PDAM index. Objective 4 will support Objectives 1-3 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.

3.6.3. TASK BY TASK DETAILED DESCRIPTION

Outcome 4.3. Institutional prioritization, commitment, and participation in WASH and WRM sector improvements, including for poor-inclusive and data-driven decision making, increased

Task 4.3.1. Accelerate gender integration and women’s agency in WASH and WRM sectors

As initially referenced in Objective 4, 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.

In PY2, USAID IUWASH Tangguh will collaborate with MWECP to develop a policy brief and guidelines on how to mainstream GESI into WASH and WRM policies, operations, and programs. USAID IUWASH Tangguh 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.

USAID IUWASH Tangguh will conduct a gender rapid 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.

Activities for PY2, including associated outputs and implementation timelines, are presented in the exhibit below.

Exhibit 25. Gender Programming 4 PY2 Activities and Timelines															
SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME												
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR 3 (CONT' D)
Task 4.3.1 Accelerate gender integration and women’s agency in WASH and WRM sectors															
• GESI Rapid assessment	FGD, meeting, field visit	Activity report													
• Dissemination of Rapid Assessment	Meeting	Activity report													
• Development of Gender profile	Workshop, FGD, meeting field visit	Gender profile document, publication material													
• Development of GESI instrument	meeting	GESI instrument													
• Capacity building to improve LGs and water and sanitation operators to provide inclusive services	Training, workshop	Activity report													
• Review existing GESI policy and PPRG	STTA, FGD, meeting	Activity Report													
• Development of GRBP	Training, workshop, FGD, meeting	GRBP document, policy													

Exhibit 25. Gender Programming 4 PY2 Activities and Timelines

SUB-TASK	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME													
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR 3 (CONT' D)	
<ul style="list-style-type: none"> Development of Guideline of Gender Mainstreaming into WASH and WRM 	STTA, workshop, FGD, meeting	Policy Brief, Guideline														

4. REGIONAL LEVEL TECHNICAL ACTIVITIES

4.1. NORTH SUMATRA

Regional Context and issues for the coming year

USAID IUWASH Tangguh will assist areas in North Sumatra--Medan city, Binjai city, Deli Serdang district (MEBIDANG), Pematang Siantar city and Simalungun district--as well as the provincial government. Three of the five LG partners are previous partners from USAID IUWASH Plus (Deli Serdang district, Medan city and Pematang Siantar city). The partners are situated in two watersheds, Bah Bolon Watershed (sources of raw water for Simalungun district and Siantar City) and the Sei Binge Watershed (sources of raw water for MEBIDANG). Six LG partners will be supported to achieve the target of WASH sector and WRM in North Sumatra.

The implementation of the program in 2023-2024 will have its own challenges with simultaneous regional head elections, presidential and legislative elections in 2024. This condition will also affect in North Sumatra Province and in five assisted regencies/cities, where the LGs will more focus on the election, and in same case will affect to budget the allocations for the programs. The positive value will be an opportunity to provide input to the provincial and district/city RPJMD documents.

Approach to rolling out USAID IUWASH Tangguh in new sites.

The first step of introduction to USAID IUWASH Tangguh is socialization and preparation of RKT (Annual Work Plan) with the LG officials and PDAM/PERUMDA. The approach strategy for the implementation of USAID IUWASH Tangguh assistance is to encourage/ensure the previous partners to serve as the champions/mentors for the two new LG partners. Peer learning can be implemented to accelerate approaches and understanding in achieving targets in their area.

Approach to introducing new technical objectives and key priorities for WRM, GESI, and WASH Finance

The main priority in PY2 is to strengthen the management of water resources in Sei Bingei sub-watershed, the raw water source for the SPAM Regional MEBIDANG. The initial activities for PY2 are:

- Identification of springs and study water resource vulnerability, with focus in Pematang Siantar city to support RPAM, and Binjai city as intake for SPAM Regional MEBIDANG;
- Targeting of institutions that are involved in WRM management (LG, NGOs including forums from community groups);
- Delivering integrated planning at the provincial level, and capacity building for relevant institutions in natural resource management; and
- Identification of the existing WASH, WRM, and GESI regulations/policy and identifying gaps, addressing them through new or revised policies/regulations.

To ensure the availability of raw water that meets the 4Ks (Quantity, Quality, Continuity and Affordability), USAID IUWASH Tangguh will take several approaches: socialization and building awareness and initial commitment from stakeholders on the importance of natural resource management; conducting a comprehensive study and analysis on water resources at SPAM intake and providing recommendations; compiling climate-resilient and adaptive action plans, cost requirements, and division roles/responsibilities of stakeholders; and integrating the action plans in APBD/N, PDAM/PERUMDA Business Plan; and, other partners action plans from PSE.

There are several other approaches that will be taken in the districts/cities, among others, as follows:

- Assist the LGs to access financial opportunities related to the WASH, WRM and GESI services;
- Conduct technical assistance to implement a performance baseline study through the Governance Index, Sanitation Index, Water Supply Index, GESI, and APBD Index;
- Develop an SBC strategy to promote sustainable sanitation and drinking water systems and campaign strategy for payment for water and sanitation services;
- Engage various communication channels to build sensitivity to GESI issues in WASH, WRM, and use the channels to promote existing LLTT services and use piped drinking water in the household.
- Strengthening GRBP and encouraging LG to integrate gender responsive budget mechanism to WASH and WRM program/activities through GAP (Gender Analysis Pathway); and
- Accelerate gender integration in the WASH and WASH sector, and encourage women managing WASH facilities and water resources to conduct joint monitoring.

The focus activities on monitoring, evaluation, and learning (MEL) are conducted through baseline and verification surveys on households implementing HWWS, and learning for WASH, WRM & GESI in marginalized populations.

Water supply and sanitation

There are several things that can be done to support the achievement of the USAID IUWASH Tangguh outcome targets in water supply, such as review and preparation of PDAM business plans, support for SPAM Regional MEBIDANG, implementation of ZAMP, preparation performance based grants of energy efficiency, NRW control, tariff adjustments to achieve FCR, improve SOPs, GIS/MIS, preparation RPAM documents and assist PDAM to increase service coverage by involving partners in the water grant based on performance.

The main target for sanitation programs in North Sumatra is to implement safely manage sanitation (SMS). The team will strengthen domestic wastewater operator and regulator performance in SMS by implementing technical, institution, regulatory/policy and social approaches. The team will also assist domestic wastewater operators' efforts to increase service coverage by encouraging drinking water customers to become domestic wastewater customers, involving the LG partners to prepare readiness criteria for sanitation grants, technical preparations for IPLT operate facility and conduct monitoring SMS access by integrated MIS.

4.2. WEST JAVA, DKI JAKARTA, BANTEN, AND WEST KALIMANTAN

Regional Context and issues for the coming year

USAID IUWASH Tangguh's West Java, DKI Jakarta and Banten (WJDB) region is located in the western part of Java island. The project is focusing work in the region in West Java province's Kota Depok and Kabupaten Bogor, Banten province's Kota and Kabupaten Tangerang and Kota Tangerang Selatan, and all cities within DKI Jakarta province. In addition, there is a satellite office in West Kalimantan province which consists of Kota Pontianak and Kabupaten Kubu Raya. Collectively, the WJDB team manages four provinces with seven cities/districts.

The main challenge that face the WJDB teams is a period of simultaneous regional head elections from 2022 to 2024. The DKI Jakarta governorship will end by 2022, three reagents/mayors will end by 2023 and four reagents/mayors will end by 2024. In the transitional period, representatives of the Ministry of Home Affairs will be tasks executors (Plt.) for those province/cities/districts. In the transitional period, Plt. have limitations in terms of strategic policies. The team will strive to identify those limitations, especially related to WASH/WRM/GESI/ WASH Finance programs, budgeting, regulations, etc., that will impact the project's activities.

Another potential challenge is a differentiation period of program years between USAID

RKT development, based on Permendagri No. 25 of 2020, is relatively new for most province/cities/districts. We have found that LGs require additional outreach and guidance to appropriately implement RKT Several steps need to be followed to develop a strong/rigid RKT, and some agencies also need to be fully informed about their roles and responsibilities. Interconnecting WASH/WRM/GESI/ WASH Finance to key stakeholders is a challenge, especially how each stakeholder knows and realizes their problems and is willing to cooperate with others to solve their problems. Coordination and commitment in all processes are important.

Approach to rolling out USAID IUWASH Tangguh in new sites

The first step is to conduct a Regional Socialization, and in addition some areas requested an audience with Regional Secretary (Sekda) before conducting RKT development with key stakeholders. Before the RKT development, some Bappeda employees have asked for a stakeholder analysis, since some of them do not understand specific roles and responsibilities for RKT development.

The team will also work in PY2 to identify and collaborate with local champions from IUWASH PLUS partner local governments that are located nearby to new sites. For example, the team will bring local government champions of Kabupaten Tangerang to two new sites of Kota Tangerang and Kota Tangerang Selatan for sharing sessions on best practices in project planning, budgeting, implementation and monitoring and evaluation.

Approach to introducing new technical objectives and key priorities for WRM, GESI, and WASH Finance

To introduce an integrated program like USAID IUWASH Tangguh that combines work in WRM, GESI and WASH Finance, the team will promote a robust and comprehensive socialization with examples of linkages among those objectives. The team will promote mapping or identification of WASH, WRM, GESI, WASH Finance baselines and trying to relate and analyze connections among objectives. Stakeholders should be guided through step by step activities required for RKT development.

Water supply and sanitation

Regarding water supply priorities and strategy, the WJDB water supply scenarios program will focus on a total of eight sites. Six sites, in Banten, DKI Jakarta and West Java, will focus on expansion of piping network under the Karian Regional Water Supply system that is planned to be in operation in 2024. The other two sites are in West Kalimantan and will focus on strengthening PDAM performance for both Kota Pontianak and Kabupaten Kubu Raya. Especially for PY2, some of the prioritized activities will include real demand surveys (RDS) and efforts to increase the number of household connections through campaigns and promotion. In addition, it is expected that there will be an increase in operational efficiency and capacity building for PDAM staff.

Regarding sanitation priorities and strategy, the WJDB sanitation scenarios program will focus on seven out of eight sites, excluding Kabupaten Kubu Raya. The highest priority of the sanitation program will be an increase in coverage services of regular desludging program (L2T2) for all those sites that have a Wastewater Treatment Plant (IPLT). A potential partnership with private sector firms is also a suitable solution to expand service coverage and increase each city/district minimum service standard (SPM) based on their RPJMD. In Kota Tangerang Selatan and Kabupaten Kubu Raya, which do not have an IPLT, USAID IUWASH Tangguh will focus on collaboration or entry into a cooperation agreement for cross boundaries fecal sludge services with sites nearby such as Kota Tangerang and DKI Jakarta, while at the same time, encouraging the LGs to build their own IPLT.

4.3. CENTRAL JAVA

In the WASH sector, currently Central Java Province has covered 82.51% access to clean water including 32,55% access to safe water, while in the sanitation has covered 79.92% access including 6.53% access to safe sanitation. Therefore, Central Java government still has a lot of works to do to reach 100% access to safe water and safe sanitation as committed in Goal 6th of the SDGs.

Under the predecessor USAID IUWASH PLUS, the project engaged Surakarta, Salatiga, Magelang and Sukoharjo District, while the cities/districts new members of the USAID IUWASH Tangguh program are Temanggung, Karanganyar and Wonogiri districts.

Even though there are five cities/districts that have received assistance in the USAID IUWASH PLUS Program, in this program there are new activities that will be developed with USAID IUWASH Tangguh, especially the Water Resource Management (WRM) program which includes activities focused on assessing the vulnerability of water sources and promoting climate change adaptation to the raw water infrastructure and PDAM drinking water supply system.

One of the important regional programs to be implemented is the WOSUSOKAS Regional Water Supply System (SPAM) Program. This program will start operating on the absorption of bulk water starting in 2025, so it is necessary to carry out advocacy and assistance to the relevant cities/districts, such as Surakarta City, Districts of Wonogiri, Sukoharjo, and Karanganyar because in 2023 and 2024 the focus will be on the construction of transmission and distribution pipelines which are under the authority of the Provincial APBD and City/District APBD. Therefore, it is necessary to ensure that the Feasibility Study (FS) and Detailed Engineering Design (DED) documents as well as budget allocations from both the Provincial APBD and Regency/City APBD can be realized.

The Scheduled Desludging Service System in Surakarta City is currently facing limited IPLT capacity. As a result, USAID IUWASH Tangguh needs to find a solution with Perumda Air Minum Surakarta to increase the IPLT capacity, so it does not become an obstacle in adding desludging services to customers.

The three new cities/regencies are still not equipped with supporting regulatory instruments. For example, they do not have domestic wastewater regulations and Kab. Temanggung does not yet have a Regional Regulation on Retribution (Perda Retribusi). For this reason, assistance for new cities/districts will also begin with the identification of existing WASH/WRM regulations.

There are several other approaches that will be taken to new cities/districts, including:

- Conduct a study of financial need with the PDAM Index and potential funding sources and increases through APBD so that the required financing and budgeting can be mapped, especially in the areas of drinking water, sanitation and WRM.
- Support increasing the capacity of domestic wastewater management institutions, as well as reviewing existing treatment systems and IPLT operations.
- Study and develop regulations that support WASH and WRM, among others, as currently there is no Domestic Wastewater Management Regulation.

Several new activities in the USAID IUWASH Tangguh program focused on new objectives and program priorities include:

- Advocating to local governments/PDAMs that the need for capital expenditures for the WASH & WRM program cannot depend on APBN funds due to fiscal limitations. Thus, it is necessary to provide other financing options, either by partnering with the private sector through the PPP/PPP/B-to-B scheme or through a loan mechanism such as with PT SMI.
- Assess the knowledge and capacity of OPD and related stakeholders on the incorporation of climate change adaptation interventions in WRM activities and promote discussion/exposure on the USAID IUWASH Tangguh WRM strategy.

The GESI approach will be carried out thoroughly in all cities/districts with the following stages:

- Identify whether there is a climate change adaptation program (particularly WRM) in the relevant OPD, and the possibility of forming a WRM committee.
- Conduct outreach to OPD and the community to share perceptions and garner support for inclusive programming.
- Assess the GESI context at the beginning of the program, which is about the role of women in WASH & WRM management.
- Build the capacity of OPD and community in the field of GESI.

For the Water Supply program in Central Java, there are several things that can be done to support the achievement of the USAID IUWASH Tangguh outcome targets, such as: WOSUSOKAS Regional SPAM, PBG Program (NRW & EE) and HAMP program, however the challenges faced are of course all these programs need to be supported by commitment and funding from the government and PDAM.

Achieving a safe sanitation service requires well-maintained and operated IPLT facilities. Based on data from the Ministry of PUPR and the condition of IPLT in previous IUWASH PLUS assisted cities/districts, all eight USAID IUWASH Tangguh cities/districts in Central Java already have IPLT with varying conditions. USAID IUWASH Tangguh needs to develop activities to strengthen the Domestic Wastewater Services institutions in all assisted cities/districts.

Year 2023-2024 will be challenging as well due to the upcoming regional head election, this will affect in all 8 Cities/Districts. Most of the impact will be like some distraction on the local government becoming more focused in the dynamic of the campaign rather than consistently expanding safely water dan sanitation access for the community.

4.4. EAST JAVA AND EAST NUSA TENGGARA

The East Java Regional Office has a satellite office in NTT Province. In the East Java Region, USAID IUWASH Tangguh works in eight cities/districts, the cities of Surabaya, Malang, Pasuruan and Blitar and the districts of Sidoarjo, Gresik, and Pasuruan, as well as the LG of East Java Province. In NTT Province, the LG partners consist of NTT Province, Kupang and Timor Tengah Selatan (TTS) District. Collectively, there are 12 LG partners that will be supported to achieve WASH and WRM target outcomes.

The implementation of the program in 2023-2024 will have its own challenges with simultaneous regional head elections, presidential and legislative elections in 2024. This condition will also affect in East Java Province and in five assisted regencies/cities, where the LGs will more focus on the election, and in same case will affect to budget the allocations for the programs. The positive value will be an opportunity to provide input to the provincial and district/city RPJMD documents

The approach to rolling out USAID IUWASH Tangguh in new sites will be implemented through socialization and preparation of RKT (Annual Work Plan) together with the USAID IUWASH Tangguh team and local government officials. Further, the approach to introducing new technical objectives and key priorities for WRM, GESI, and WASH Finance will be implemented through a Workshop for equalization of perceptions about WRM, GESI & WASH Finance.

The initial technical activities that will be implemented in PY2 are:

- Identification of springs and study of water resource vulnerability (all cities with focus of Malang District);
- Review existing policies & regulations of all LG partners, identify WASH & WRM regulations to be enhanced or introduced;
- Strengthen UPTD in order to meet requirements to become BLUD Gresik District;
- Support issuance of Mayor's Decree on the designation of PDAM as LLTT operator; and
- Conduct workshop on setting baselines for the Governance, Sanitation and Water Supply Performance Indices.

With respect to sanitation, the Team will identify gaps in Domestic Waste Water management capacity in all Cities/Districts; introduce the LLTT program for Surabaya, Blitar & Pasuruan City; and facilitate cooperation between regions for the utilization of Septage Treatment Plant for Pasuruan City and District. The East Java Team also plans to implement a campaign to promote safely managed sanitation services & arouse willingness to pay through various communication channels, especially for existing LLTT areas (Sidoarjo and Gresik District). Further, the team will lead activities for the preparation of PPRG for WASH (Blitar City & Gresik District) and also campaign on the importance of safe and resilient water in catchment areas and demand creation for WASH services.

For monitoring and learning, the team will implement baseline surveys, especially for households implementing HWWS, verification survey for marginal population and identify learning for WASH & WRM.

In this PY2, it is expected that the results of identification and mapping of the chlorination system will be obtained in order to improve safely manage for drinking water.

There will also be an assessment of the need to improve the performance of PERUMDA Air Minum/PDAM in East Java so that assistance can be provided in the preparation of business plans,

energy efficiency, NRW control, tariff adjustments, SOPs, GIS, RPAM and WQQ according to needs for each PERUMDA Air Minum/ PDAM. The team will also provide assistance in increasing service coverage by involving partners in the Water Hibah or Water Grant based on Performance.

In addition, an assessment will be carried out for the utilization of bulk water from the Umbulan Spring.

There are still 6 cities/regencies (Surabaya City, Sidoarjo District, Gresik District, Pasuruan City, Pasuruan District, Malang District and Blitar City) in East Java Province and 2 Regencies (Kupang District and South Central Timor District) in NTT Province which are not yet free of open defecation. Meanwhile, Malang City and Gresik Regency in East Java Province have been declared as defecation-free areas.

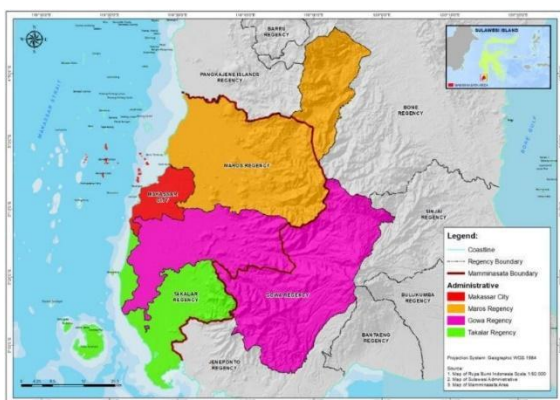
The achievement of access to safely managed sanitation in 9 cities/districts of assisted areas is still below 10%, except Malang City which has reached around 15%.

Among the 8 assisted cities/districts in East Java Province, only Pasuruan Regency does not have IPLT while the other 7 regions already have IPLT. For the 2 LG partners in NTT Province, both of them do not have IPLT facilities. Domestic wastewater management institutions in 4 Cities / Regencies of East Java have been in the form of UPTD (Malang City, Malang Regency, Sidoarjo Regency, and Gresik Regency), while the other 6 regions are still implemented by Dinas.

Of the 10 assisted cities/regencies, 4 of them (Malang City, Malang Regency, Sidoarjo Regency and Gresik Regency) have implemented the LLTT program, while Blitar City will only start an LLTT.

4.5. SOUTH SULAWESI AND PAPUA

Under USAID IUWASH Tangguh, the South Sulawesi region will work in seven cities/districts, Makassar city, Maros district, Barru district, Gowa district and Takalar district of South Sulawesi Province and in Jayapura city and Jayapura district of Papua Province. Of those seven cities/districts, four were covered under the USAID IUWASH PLUS program, Makassar city, Barru district, Jayapura city and Jayapura District, while three are new, Maros District, Gowa district and Takalar district.



The four cities/districts of South Sulawesi province are part of the National Strategic Area (KSN) called Mamminasata Metropolitan Area that covers Makassar City, Takalar Regency, part of Gowa Regency, and part of Maros Regency. There are 46 sub-districts that are members of Metropolitan Mamminasata with a population of approximately 2.8 million people and with a total area of approximately 2,667 km². One of the focuses of this program will be providing support for the management of Urban Infrastructure

Network Systems is Mamminasata Clean Water Supply Program, mainly Maros and Takalar and Liquid Waste Management Program, Wastewater Treatment Plant in Makassar City (Losari Beach). USAID IUWASH Tangguh will work closely with UPT Mamminasata, Provincial Government and related technical offices to support the target for Water and sanitation.

The water source for the Mamminasata Metropolitan area is from Jeneberang watershed and for Barru district is Karajae watershed. Jayapura city and district's source is Memberamo watershed. USAID IUWASH Tangguh will work with each LG to discuss on priority needs, issues, and strategies to implement the project related to watershed areas.

In connection with the simultaneous local elections that will be held in 2024, in the South Sulawesi region, the Jayapura Mayor concluded its term of office in early 2022 and is currently held by the executor of the task and the head of Takalar district, Gowa district and Jayapura district will be completed by the end of 2022, while Makassar City, Maros district and Barru district will be completed in 2024. In principle, the transition of regional leadership from regional heads to acting regional heads does not have much effect on program activities because the implementing officials are in accordance with Law Number 23 of 2014 in Article 130 Paragraph (1) and Paragraph (3) as well as Article 131 paragraph (4) concerning Regional Government which regulates Acting regional heads or implementing regional head duties is only prohibited to perform employee transfers; cancel the permit that has been issued by the previous official and/or issue a permit that is contrary to the one issued by the previous official; Making policies on regional expansion that are contrary to the policies of previous officials; and make policies that are contrary to the policies of the administration of government and the development program of previous officials.

Other duties are the same as the mayor/regent. However, there are a few things that might have an effect when concentration of regional finance will focus more on the election process; the mobilization of ASN by Political Activists to participate in the election process where this will affect the concentration and focus of our partners in LG offices; understanding and commitment of the acting regional head to the USAID IUWASH Tangguh program.

On the other hand, there is an opportunity for the program to participate in including the drinking water and sanitation program into the RPD (Regional Development Plan) for the period 2023 - 2026.

Safely managed water and sanitation in selected cities/districts is still very low in coverage as shown in the table below. The sanitation data source of city/districts in South Sulawesi province is from the data sent to Bappenas by Sekda from each LG and for Jayapura city and Jayapura district is from Papua province data. Data source for water supply is from "Buku Kinerja BUMD Air minum Wilayah III Tahun 2021, PUPR". Regarding the water and sanitation target, USAID IUWASH Tangguh will work closely with PDAMs both for safely managed sanitation and safely managed drinking water, particularly in PDAM Makassar and with wastewater operators/UPT PALD for safely managed sanitation in Makassar, Jayapura city and Jayapura district. The team will promote establishment of a wastewater operator in Barru district and start to initiate the discussion on establishment of a waste operator in Maros and Takalar district.

NO	City/District	Proper Sanitation - (%)	Safely Managed Sanitation (%)	Proper Drinking Water (%)	Layanan PDAM	Safely Managed Drinking Water (%)
		2021	2021	2021		2021
1	Makassar city	70	18	63.52		No data
2	Maros district	33	2	24.84		No data
3	Barru district	87.50	2	22.19		No data
4	Gowa district	80	2	24.69		No data
5	Takalar district	99.50	3	31.26		No data
6	Jayapura district	84.6	0.02			
7	Jayapura city	86.22	0.68			
1	Prov. SULSEL (Data SUSENAS KorBPS 2021)		3.90%			
2	Prov. PAPUA (Data SUSENAS KorBPS 2021)		2.10%			

Gowa district of South Sulawesi Province has no IPLT and there is no budget from the national government for IPLT construction up to 2024. The team will encourage the LG to allocate funds for a district or regional (shared) IPLT and/or facilitate collaboration with the private sector for financing.

The project will conduct water resource vulnerability assessment at Jeneberang watershed to inform an implementation strategy and technical approach for WRM activities with the LG and the community.

On Social Behavior Change and GESI, USAID IUWASH Tangguh will conduct a Formative Study and promote socialization of the eventual SBC strategy. In parallel there will be rapid assessment and community entry focused on WASH and WRM promotion through monitoring and evaluation team and or PKK team.

5. PROGRAM MANAGEMENT

5.1. INTRODUCTION

The USAID IUWASH Tangguh project works in ten provinces (split into 5 regions) and includes activities in the WASH and WRM sectors. As such, project management over the five years of implementation is complex. This section covers the approaches and tasks to be undertaken during Year 2 of implementation. In this section, we cover the areas of general project management, the personnel recruitment plan, 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.

5.2. GENERAL PROJECT MANAGEMENT

In PY2, USAID IUWASH Tangguh team continues to prioritize clear organizational and management structures in order to ensure effective project implementation, especially in implementing technical component activities with the support of an operations system that facilitates compliance with all relevant rules and regulations. This aspect is important for USAID IUWASH Tangguh to ultimately achieve success in achieving the project targets. The project's approach 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. The organizational chart presented is based on the final status of project recruitment in all regional and national offices.

5.2.1. MANAGEMENT PLAN

As depicted in Annex 3, USAID IUWASH Tangguh key personnel and lead finance/administrative staff will focus on ensuring the full operation of all regional and national offices in the first Quarter of PY2. The full operation means that all planned staff are recruited and all management systems are in place to support the project implementation. The focus of management plan in PY2 will:

- Continue to provide the USAID IUWASH Tangguh team the resources needed to match the project approaches with tailored technical assistance that responds to local needs;
- Practice clear lines of authority whereby the most senior advisors at national and regional levels provide overall direction in their respective technical and management areas within the project;
- Coordinate with national partners to have strong technical plans managed by senior objective teams with the support from the management team. The technical plans at national level will focus on strong synergy between USAID IUWASH Tangguh and key ministries working in WASH and WRM programs;
- Completing the PY2 Annual Workplan/RKT (Rencana Kerja Tahunan) for all assisted Local Government cities and districts. The focus on this plan is to discuss and consult the five years program frameworks with GOI (disaggregated by year). This plan will be developed together between USAID IUWASH Tangguh team and LG institutions. Each RKT contains integrated plans between USAID IUWASH Tangguh and LG to support the achievement of target on safely managed drinking water and sanitation access as stated in their RPJMD

- Ensure the integration of WASH and WRM sectors, across all activities and at regional and national level, to support the increased access of safely managed drinking water and sanitation services that are resilient to the impact of climate change
- Ensure the Impact Evaluation Team receives any needed support, especially for data collection activities that will take place during PY2.

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

NATIONAL OFFICE

The key role of the national office in Jakarta is to assure that all project activities at national level are effectively coordinated with all key national counterparts. As the headquarters for USAID IUWASH Tangguh, the office will manage relationships and reporting to USAID and central government counterparts. The Jakarta Office is also the base for the Project's designated five key personnel, objective leads, senior technical National Coordinators and specialists, and lead finance and administrative personnel.

To maintain the coordination between national and regional teams in supporting project implementation, the USAID IUWASH Tangguh Management Team decentralizes implementation across technical components and to regionally teams. The objective and Regional Teams will ensure the development of a strategic approach at the national level and also customized to the local context in each area the project works. This decentralized approach will be supported by frequent and open communication among the team members. This strategy will allow the project team members to share the lessons learned and technical knowledge among different objective team members. 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.

Specifically, the role of the National office in PY2 will:

- Ensure the implementation of overall strategic technical approach and provide technical directions to USAID IUWASH Tangguh regional teams
- Continue to assure the five principles of USAID IUWASH Tangguh (PSE; GESI; alignment and coordination; CLA; and sustainability and capacity building) are embedded in project activities to support the achievement of project targets
- Engage and work together with the national counterpart of the Government of Indonesia especially Bappenas and its Technical Team (the Ministry of Public Works, the Ministry of Health, the Ministry of Home Affairs) 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 actively participate in donor coordination meetings
- 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, especially in implementing Pause and Reflect approaches to strengthen to follow-on project in PY3
- Oversee USAID IUWASH Tangguh administration and finances, ensuring that the project adheres to USAID and DAI policies and procedures including, for example, IT security, ethics and compliance.

REGIONAL OFFICES

After the full establishment of the USAID IUWASH Tangguh regional offices, each regional office will support the project implementation at regional level. All the regional offices are located in capital cities that have reliable access to Jakarta and the national office and are conveniently positioned near clusters of assisted cities and districts. As planned, three of the five regional offices will have satellite offices (small regional offices), as outlined in the exhibit below.

Exhibit 26. USAID IUWASH Tangguh Satellite Offices

No	Regional Office	Location	Satellite Office
1	North Sumatra	Medan city	-
2	West Java/DKI Jakarta/Banten (WJDB)	Jakarta city	West Kalimantan province
3	Central Java	Surakarta city	-
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 first quarter of PY2, the Regional Team will finalize the development of the Annual Workplan/*Rencana Kerja Tahunan (RKT)* that is required by the GOI. The finalization of the RKT development will be marked by the signing of the RKT by the head of Bappeda/Sekda and the USAID IUWASH Tangguh COP.

As part of the management strategy, 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 participate in project coordination activities for the technical and administration matters. The coordination meeting will be arranged by virtual or face-to-face meetings and are designed to strengthen the implementation of program framework, sharing the lessons learned and discuss specific issues and challenges raised during the project implementation. This approach will capitalize on the scale of USAID IUWASH Tangguh and facilitate open communication, team building, adaptive management, and team cohesion. For the virtual event, 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.

5.3. INTERNAL COORDINATION WITHIN THE USAID IUWASH TANGGUH TEAM

USAID IUWASH Tangguh Management Team continues to conduct internal coordination to support the project implementation. The internal coordination within the USAID IUWASH Tangguh team is a key project management responsibility. The coordination aims to achieve several objectives as follows:

- Strengthen the understanding of the USAID IUWASH Tangguh team at national and regional level on integration of activities across the four objectives through the IRIS approach
- Strengthen strong team cohesion by encouraging and supporting a culture of open communication and adaptive management
- Maximize the exchanges among the internal team to implement the project activities tailored to the local context. This exchange will be conducted through the use of recurring web-based video check-ins and joint project planning among objective teams across the regions.

The section below describes activities and approaches for internal coordination within the USAID IUWASH Tangguh team.

5.3.1. RELATIONSHIP BETWEEN THE PROJECT AND DAI HOME OFFICE

The support of DAI's home office (HO) team is important to ensure the success of project implementation. USAID IUWASH Tangguh management team will continue to coordinate with the HO team to support the PY2 project implementation. The main coordination with the HO Team will be conducted through regular check-in calls and the quarterly project reviews with the COP and DCOPs to discuss and resolve management and technical issues or respond to requests for information. The coordination will cover several aspects of the project implementation such as finance, contracts, procurement, Information and Management Technology, human resources, communication, etc. The coordination with the HO team aimed to ensure that the Management Team has the support and resources needed in managing the implementation of USAID IUWASH Tangguh activities as well as to meet or exceed USAID expectations. Additional activity is conducting a client satisfaction meeting with the TOCOR to help ensure that the project meets or exceeds USAID's expectations. This meeting is planned to be conducted 2 times per year. The DAI HO Technical Team will also provide on-demand technical support to activities throughout project implementation. As necessary members of the HO team will also travel to Indonesia to provide in-country support to the team and the project.

5.3.2. MATRIX MANAGEMENT

USAID IUWASH Tangguh is a complex project with a large, dispersed team working in the WASH and WRM sectors, as well as a range of cross-cutting areas. The project is also geographically dispersed working in ten provinces that includes 38 assisted cities and districts. To ensure effective management, the Management Team applies a "matrix management" structure to support an effective communication and coordination within the team. USAID IUWASH Tangguh's matrixed structure aims to maximize the utilization 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. After the full operation of national and regional teams the USAID IUWASH Tangguh Management Team revise the matrix management for the PY2. More detail on matrix management is provided in Annex 3.

5.3.3. MANAGEMENT AND COMPLIANCE SYSTEM

During PY1 project implementation the USAID IUWASH Tangguh start-up successfully set-up management and compliance systems. This has helped the project team with rapid start-up and implement the project activities since the beginning period of the project. During PY2 project implementation, the Management Team will continue to improve this system including some adjustments to fit the need of PY2 project implementation. Below are detailed plans to improve the development of management and compliance system:

- 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. In PY2 the system will be further tailored and modified to meet the need of project implementation. The HO backstop team will continue to provide support to update the TAMIS database.
- **IT infrastructure and systems.** The IT Team will continue to focus on providing project equipment that comply with DAI IT policies and procedures. After full operation of the project team at national and regional levels, the IT team will continue to maintain and monitor the network system and server maintenance, and establish product instruction manuals as needed. The IT team of USAID IUWASH Tangguh will continue to receive support from DAI HO IT team especially on troubleshooting of IT related issues.
- 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 was developed in PY1 including the virtual training. In PY2, the Finance Team will continue to use the vFER system across offices.
- The **Field Operations Manual (FOM)** is 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 manual has been developed in PY1 and already been used by the team. In PY2, if there is any adjustment needed, the manual will be reviewed regularly to support the project implementation. The DCOP-Operations will be responsible for maintaining the implementation of the regulation and review any change needed. project budgeting

USAID IUWASH Tangguh continues to operate 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.

5.3.4. PROJECT PROCUREMENT

A large amount of the procurement for USAID IUWASH Tangguh was done in PY1 as part of the start-up of project activities. USAID IUWASH 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. In PY2, the USAID IUWASH Tangguh team will continue to proceed this mechanism on procurement activities.

Exhibit 27 below provide detailed activities planned in PY2 for the general project management activities.

Exhibit 27. Project Management Main Programs for PY2.						
ACTIVITY	INPUT	OUTPUTS	YEAR 2 TIMEFRAME			
			Q1	Q2	Q3	Q4
Recruit outstanding Jakarta and regional-based staff	Meeting, LTTA, STTA	Outstanding 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	Strengthen understanding of all on-boarded team members, and improved levels 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				
Maintain USAID IUWASH Tangguh Technical and Administrative Management Information System (TAMIS)	Meeting, LTTA, STTA	Project TAMIS is maintained to meet USAID IUWASH Tangguh technical and operational needs				
Apply USAID IUWASH Tangguh Field Operations Manual	Meeting, LTTA	Operational manual for USAID IUWASH				

Exhibit 27. Project Management Main Programs for PY2.

ACTIVITY	INPUT	OUTPUTS	YEAR 2 TIMEFRAME			
			Q-1	Q-2	Q-3	Q-4
		Tanggung project implemented				
Maintain IT infrastructure and systems	Meeting, LTTA, STTA	IT equipment function well to support the project operation at Jakarta and regional offices				
Monitoring Field Accounting System (FAS)	Meeting, LTTA, STTA	Project financial system is used by trained finance staff				
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				

5.4. HUMAN RESOURCE ACTIVITY PLAN

Most of the project personnel recruitment was carried out in PY1. The Human Resource (HR) team will finalize the staff recruitment in PY2 especially for the vacant position or the position planned to be recruited in PY2. Another significant activity for the HR team in PY2 is development of annual performance review tool based on the standard DAI performance review system. This tool is important to review the performance of project staff. A 360^o review will be completed annually for all staff.

5.5. SUB-CONTRACTOR PLAN

DAI, as the primary contractor of USAID IUWASH Tangguh, partners with two sub-contractors, Planet Partnerships and the Solstice Institute LLC (mWater), to implement the USAID IUWASH Tangguh project. In PY1, all the sub-contractors recruited the LTTA and STTA needed. In PY2, USAID IUWASH Tangguh team will work with the subcontractors to hire local and expat STTA needed to support the PY2 program activities. Support from Planet Partnerships will focus on developing the project's private sector engagement (PSE) strategy and 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.

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

There was very positive and close coordination between the USAID IUWASH Tangguh Team and key partners at the national level during the start-up period of the project. The 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. The partners have supported the project regional socialization as well as the development of RKT. In PY2, the USAID IUWASH Tangguh will continue to coordinate with the key national-level partners to focus on the providing technical support and conduct the project administration. The exhibit below, presents a timeline for coordination activities at the national Level.

Exhibit 28. PY2 Coordination Activity with the Executing Agency and Technical Team at National Level.

ACTIVITY	INPUT	OUTPUTS	YEAR 2 TIMEFRAME			
			Q-1	Q-2	Q-3	Q-4
Consultation on Life-of-Project and PY2/PY3 activities	LTTA, meeting	Framework of Five-Year Program reviewed and PY2/PY3 activities discussed with national partners				
Technical Team Coordination Meeting	LTTA, meeting	Progress of USAID IUWASH Tangguh project shared and planning for the next quarter completed				
Monitoring visit to USAID IUWASH Tangguh site	LTTA, meeting and field visit	Progress of USAID IUWASH Tangguh project monitored and challenges raised and discussed				
Echelon 2 Meeting	LTTA, meeting	Progress of USAID IUWASH Tangguh project shared and strategic support discussed with the decision makers				
Coordination on Annual Workplan (Rencana Kerja Tahunan/RKT) developed by LG partners	LTTA, meeting	Inputs and comments for the Annual Workplan (Rencana Kerja Tahunan/RKT) developed by LG partners collected to improve the document				
BAST Reporting of PY1 project activities	LTTA, meeting and review report	BAST of PY1 project activities submitted and approved				

5.7. COORDINATION WITH THE USAID INDONESIA TEAM

USAID IUWASH Tangguh will continue to have regular coordination 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.

- Strengthen the collaboration with other USAID Partners. In PY1, USAID IUWASH Tangguh Team identified potential collaboration with USAID ERAT and USAID SEGAR. In PY2, USAID IUWASH Tangguh Team will implement the collaborative activities with these partners and also continue to seek other potential collaborations as needed.
- 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 below summarize the PY2 coordination activities with the USAID/Indonesia Team

Exhibit 29. PY2 Coordination Activity with the USAID/Indonesia Team						
ACTIVITY	INPUT	OUTPUTS	YEAR 2 TIMEFRAME			
			Q-1	Q-2	Q-3	Q-4
Biweekly Meeting with USAID/Indonesia Team	Meeting, LTTA	<ul style="list-style-type: none"> • 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				

5.8. PROJECT COMMUNICATION

Capturing project activities and sharing successes in an impactful way require 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 program 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 program will optimize the use of online-based communication channels, such as website and social media platforms that are conducive to viewing via mobile phones.

The program communication activities in PY2 will include the following:

- **Develop and maintain digital communication channels** to update and disseminate program and outreach materials and activities, as well as sharing successes and lessons learned. In PY2, the program will continue the website redeveloping process from the previous USAID IUWASH PLUS website to USAID IUWASH Tangguh. The e-newsletter

platform is included on the website; the regular production and distribution of e-newsletter via email blast will start in the second quarter of PY2. The target number of subscribers for PY2 is 150 subscribers. For social media platforms, starting from PY2, all social media handles will be regularly updated and managed by the National Coordinator for Outreach and Media under the Objective 4 (link to task 4.2.2). The communication team will only provide necessary support.

- **Develop digital media products** for digital and social media platforms. In PY2, 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 program 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. In PY2, the communication team will continue the production of programmatic and regional factsheets, banners, and other relevant IEC materials, as well as stories/news for project reports, e-newsletter, and website. The team will also support the production of event materials for regional/ national events and field visits.
- **Support the project reports and 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.
- **Support partners' WASH and WRM events and IEC materials development** to share program analyses, lessons learned, best practices, and achievements in coordination with the national/regional program specialists.
- **Co-branding and branding exemption requests** for the products and events supported by USAID IUWASH Tangguh for its activities with the national and regional governments. The program anticipates 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 co-branding for its event and informational materials and publications.
 - Branding exemption: On certain occasions, USAID IUWASH Tangguh receives specific requests 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. For PY2, USAID IUWASH Tangguh has not been able to identify and submit a list of potential exceptions and, therefore, would submit request for branding exemption to COR on a case-by-case basis depending on the GOI request for the specific support.

Exhibit 30. PY2 Program Communication Activities and Timeline

ACTIVITY	INPUTS	OUTPUTS	YEAR 2 TIMEFRAME												YEAR 3 (CONT'D)		
			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
Develop & maintain program website	Meeting, PO, LTTA	Program website is live and accessible to the public															
Produce e-newsletter on the website and subscriber database	Writing story, LTTA	<ul style="list-style-type: none"> e-newsletter distributed via email blast Number of subscribers 															
Develop digital media products	Design work, LTTA	Digital media products, e.g., podcast and educational video															
Develop IEC products and stories	Desk study, design works, LTTA	<ul style="list-style-type: none"> Produced and disseminated IEC products & stories Reg./nat. event material 															
Write weekly highlights	Story writing, LTTA	Weekly report of highlighted activities															
Support the development of project reports & deliverables	Layout work, LTTA	Final project reports and deliverables for USAID submission															

5.9. 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 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 (activities that do not have an effect on the natural or physical environment) 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

Activities are considered as negative determination without condition (NDWC) if the activity has potential adverse effects, but which can be mitigated and monitored with normal good practices. As stated in the IEE, several outcomes are considered as categorical exclusion and NDWC, so the activities under these outcomes are potentially considered as NDWC:

- 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.
- Outcome 2.2. Performance of drinking water and sanitation service providers increased
- Outcome 2.3. City-wide inclusive, climate-resilient, and financially viable WASH and WRM institutional arrangements and service models established and expanded.
- Outcome 3.1. Improved water quality, quantity, and reliability in watersheds which supply raw water for drinking water services
- Outcome 3.3. Expanded information, analysis, and advocacy for climate-resilient decision making in policy, programs, and operations
- Outcome 4.1. Latrine use, maintenance, and desludging behaviors adopted and become social regulated norms.
- Outcome 2.3. City-wide inclusive, climate-resilient, and financially viable WASH and WRM institutional arrangements and service models established and expanded.
- Outcome 3.1. Improved water quality, quantity, and reliability in watersheds which supply raw water for drinking water services
- Outcome 3.2. Increased accountability and equity in WRM and climate-resilient WASH regulatory and management arrangements.
- Outcome 3.3. Expanded information, analysis, and advocacy for climate-resilient decision making in policy, programs, and operations.
- Outcome 3.4. Strengthened national and subnational GOI WRM policy, guidance, and programs to support resilient drinking water services.
- Outcome 4.1. Latrine use, maintenance, and desludging behaviors adopted and become social regulated norms.

ANNEXES

ANNEX I. DETAILED PY2 TARGETS AND THE LIFE OF ACTIVITY TARGETS BY REGION

AMELP Performance Indicators	Target Over the Life of Activity	PYI Achievement	To Date Achievement	PY2 Target			Estimated Total Achievement by End of PY2
				Region	Target	Total	
Objective I: Strengthened WASH and WRM Sector Governance and Financing							
IT 1-1 (Output) Number of new and/or revised laws, policies, regulations, or agreements in place that promote access to improved WASH services	65	0	0	NSRO	1	5	5 (7.69%)
				WJDB	1		
				National	0		
				CJRO	1		
				EJRO	1		
				SSRO	1		
IT 1-2 (Output) Number of public-private partnerships established with USAID support	50	0	0	NSRO	0	2	2 (4.00%)
				WJDB	1		
				National	0		
				CJRO	1		
				EJRO	0		
				SSRO	0		
IT 1-3 (Output) Number of social inclusion and public accountability measures implemented by supported institutions	35	0	0	NSRO	1	5	5 (14.29%)
				WJDB	1		
				National	0		
				CJRO	1		
				EJRO	1		
				SSRO	1		

AMELP Performance Indicators	Target Over the Life of Activity	PYI Achievement	To Date Achievement	PY2 Target			Estimated Total Achievement by End of PY2
				Region	Target	Total	
Objective 1: Strengthened WASH and WRM Sector Governance and Financing							
IT 1-4 (Outcome) Value of new funding mobilized to the water and sanitation sectors as a result of USG assistance [HL.8.4-1]	\$300M	0	0	NSRO	\$269,350	\$2,000,000	\$2,000,000 (0.67%)
				WJDB	\$800,000		
				National	\$0		
				CJRO	\$401,300		
				EJRO	\$269,350		
				SSRO	\$260,000		
IT 1-5 (Outcome) Change in overall budget appropriations for WASH and WRM by targeted local governments	20%	0	0	NSRO	0	0	0 (0%)
				WJDB	0		
				National	0		
				CJRO	0		
				EJRO	0		
				SSRO	0		
IT 1-6 (Outcome) Number of institutions strengthened to manage the urban environment	100	0	0	NSRO	0	0	0 (0%)
				WJDB	0		
				National	0		
				CJRO	0		
				EJRO	0		
				SSRO	0		
Objective 2: Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services							
IT 2-1 (Output) Number of WASH and WRM workers' skills and competencies improved as a result of USG assistance	5,000	0	0	NSRO	90	500	500 (10.00%)
				WJDB	100		
				National	0		
				CJRO	100		
				EJRO	120		
				SSRO	90		

AMELP Performance Indicators	Target Over the Life of Activity	PY1 Achievement	To Date Achievement	PY2 Target			Estimated Total Achievement by End of PY2
				Region	Target	Total	
Objective 2: Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services							
IT 2-2 (Output) Number of new financial/ operational and management tools developed by service providers as a result of USG assistance	10	0	0	NSRO	0	1	1 (10.00%)
				WJDB	0		
				National	1		
				CJRO	0		
				EJRO	0		
				SSRO	0		
IT 2-3 (Outcome) Number of people gaining access to a safely managed drinking water services as a result of USG assistance [HL.8.1-2]	1,500,000	0	0	NSRO	0	0	0 (0%)
				WJDB	0		
				National	0		
				CJRO	0		
				EJRO	0		
				SSRO	0		
IT 2-4 (Outcome) Number of people receiving improved service quality from an existing basic or safely managed drinking water service as a result of USG assistance [HL.8.1-3]	N/A	0	0	NSRO	N/A	0	0 N/A
				WJDB			
				National			
				CJRO			
				EJRO			
				SSRO			
IT 2-5 (Outcome) Number of people gaining access to safely managed sanitation services as a result of USG assistance. [HL.8.2-3]	1,000,000	0	0	NSRO	0	0	0 (0%)
				WJDB	0		
				National	0		
				CJRO	0		
				EJRO	0		
				SSRO	0		

AMELP Performance Indicators	Target Over the Life of Activity	PY1 Achievement	To Date Achievement	PY2 Target			Estimated Total Achievement by End of PY2
				Region	Target	Total	
Objective 2: Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services							
IT 2-6 (Output) Number of cities/districts implementing improved desludging services	35	0	0	NSRO	0	3	3 (8.57%)
				WJDB	1		
				National	0		
				CJRO	1		
				EJRO	1		
				SSRO	0		
IT 2-7 (Outcome) 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]	100	0	0	NSRO	0	0	0 (0%)
				WJDB	0		
				National	0		
				CJRO	0		
				EJRO	0		
				SSRO	0		
Objective 3: Improved Water Resource Management to Support Resilient Drinking Water Services							
IT 3-1 (Output) Number of WRM policies, guidance, and programs to support resilient drinking water services	60	0	0	NSRO	1	5	5 (8.33%)
				WJDB	1		
				National	0		
				CJRO	1		
				EJRO	1		
				SSRO	1		
IT 3-2 (Output) Number of institutions with management information systems and/or data management tools adopted as a result of USG assistance	40	0	0	NSRO	0	2	2 (5.00%)
				WJDB	1		
				National	0		
				CJRO	0		
				EJRO	0		
				SSRO	1		

AMELP Performance Indicators	Target Over the Life of Activity	PY1 Achievement	To Date Achievement	PY2 Target			Estimated Total Achievement by End of PY2
				Region	Target	Total	
Objective 3: Improved Water Resource Management to Support Resilient Drinking Water Services							
IT 3-3 (Output) Number of climate vulnerability assessment reports produced to support improvement of raw water sources of assisted PDAM	35	0	0	NSRO	1	5	5 (14.29%)
				WJDB	1		
				National	0		
				CJRO	1		
				EJRO	1		
				SSRO	1		
IT 3-4 (Outcome) Amount of investment mobilized for climate change adaptation as supported by USG assistance [EG.11-4]	\$10M	0	0	NSRO	0	0	0 (0%)
				WJDB	0		
				National	0		
				CJRO	0		
				EJRO	0		
				SSRO	0		
IT 3-5 (Outcome) Number of institutions with improved capacity to assess/address climate change risks supported by USG assistance [EG.11-2]	100	0	0	NSRO	2	10	10 (10.00%)
				WJDB	2		
				National	0		
				CJRO	2		
				EJRO	2		
				SSRO	2		
IT 3-6 (Outcome) Number of people benefiting from adoption and implementation of measures to improve water resources management as a result of USG assistance [HL8.5-1]	300,000	0	0	NSRO	0	0	0 (0%)
				WJDB	0		
				National	0		
				CJRO	0		
				EJRO	0		
				SSRO	0		

AMELP Performance Indicators	Target Over the Life of Activity	PY1 Achievement	To Date Achievement	PY2 Target			Estimated Total Achievement by End of PY2
				Region	Target	Total	
Objective 4: Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements in WASH and WRM							
IT 4-1 (Output) Number of people reached through SBC campaigns promoting WASH and WRM resilience	1,000,000	0	0	NSRO	5,000	50,000	50,000 (5.00%)
				WJDB	10,000		
				National	0		
				CJRO	20,000		
				EJRO	10,000		
				SSRO	5,000		
IT 4-2 (Output) 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]	5,000	0	0	NSRO	50	250	250 (5.00%)
				WJDB	50		
				National	0		
				CJRO	50		
				EJRO	50		
				SSRO	50		
IT 4-3 (Outcome) Percentage of households with soap and water at a handwashing station on premises [HL.8.2-5]	30%	0	0	NSRO	0	0	0 (0%)
				WJDB	0		
				National	0		
				CJRO	0		
				EJRO	0		
				SSRO	0		
IT 4-4 (Outcome) Percentage 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]	20%	0	0	NSRO	1%	1%	1% (5.00%)
				WJDB	1%		
				National	1%		
				CJRO	1%		
				EJRO	1%		
				SSRO	1%		

ANNEX 2. REGIONAL TARGETS TOWARDS AMEP RESULTS

NORTH SUMATRA REGIONAL OFFICE

Indicator	LOA Target	City/District					Total	Remark
		Kota Medan	Kota Binjai	Kab. Deli Serdang	Kota Pematang Siantar	Kab. Simalungun		
Objective 1: Strengthened WASH and WRM Sector Governance and Financing								
IT 1-1 (Output) Number of new and/or revised laws, policies, regulations, or agreements in place that promote access to improved WASH services	65	0	1	0	0	0	1	Regulation on Mebidang Regional SPAM Institutional will be NSRO priority in this year
IT 1-2 (Output) Number of public-private partnerships established with USAID support	50	0	0	0	0	0	0	Activity will be started with identification of funding program. No PPP target in this year
IT 1-3 (Output) Number of social inclusion and public accountability measures implemented by supported institutions	35	0	0	1	0	0	1	Potential target is from Radio Deli Serdang Berseri
IT 1-4 (Outcome) Value of new funding mobilized to the water and sanitation sectors as a result of USG assistance [HL.8.4-1]	\$300M	\$0	\$0	\$269,350	\$0	\$0	\$269,350	Amount of leveraging comes from public funding
IT 1-5 (Outcome) Change in overall budget appropriations for WASH and WRM by targeted local governments	20%	0	0	0	0	0	0	This year will report baseline score and the progress will be targeted in the next program year
IT 1-6 (Outcome) Number of institutions strengthened to manage the urban environment	100	0	0	0	0	0	0	No target in this year

Indicator	LOA Target	City/District					Total	Remark
		Kota Medan	Kota Binjai	Kab. Deli Serdang	Kota Pematang Siantar	Kab. Simalungun		
Objective 2: Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services								
IT 2-1 (Output) Number of WASH and WRM workers' skills and competencies improved as a result of USG assistance	5,000	20	30	20	10	10	90	Participants of skill and competency specific training on WASH & WRM
IT 2-2 (Output) Number of new financial/ operational and management tools developed by service providers as a result of USG assistance	10	N/A					0	This result is applied only at national level. Potential targets are tools of MIS RPAM, WQQ, Asset Management or Sanitation SOP
IT 2-3 (Outcome) Number of people gaining access to a safely managed drinking water services as a result of USG assistance [HL.8.1-2]	1,500,000	0	0	0	0	0	0	No target in this year because this indicator related to index progress
IT 2-4 (Outcome) Number of people receiving improved service quality from an existing basic or safely managed drinking water service as a result of USG assistance [HL.8.1-3]	N/A	N/A					N/A	No specific target for this indicator
IT 2-5 (Outcome) Number of people gaining access to safely managed sanitation services as a result of USG assistance. [HL.8.2-3]	1,000,000	0	0	0	0	0	0	No target in this year because this indicator related to index progress

Indicator	LOA Target	City/District					Total	Remark
		Kota Medan	Kota Binjai	Kab. Deli Serdang	Kota Pematang Siantar	Kab. Simalungun		
Objective 2: Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services								
IT 2-6 (Output) Number of cities/districts implementing improved desludging services	35	0	0	0	0	0	0	No target in this year, will be focused on index
IT 2-7 (Outcome) 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]	100	0	0	0	0	0	0	This year will report baseline score and the progress will be targeted in the next program year
Objective 3: Improved Water Resource Management to Support Resilient Drinking Water Services								
IT 3-1 (Output) Number of WRM policies, guidance, and programs to support resilient drinking water services	60	0	1	0	0	0	1	In line with CVA report development, policy or guidance will be developed in Binjai City
IT 3-2 (Output) Number of institutions with management information systems and/or data management tools adopted as a result of USG assistance	40	0	0	0	0	0	0	No target in this year, will be focused on CVA report development
IT 3-3 (Output) Number of climate vulnerability assessment reports produced to support improvement of raw water sources of assisted PDAM	35	0	1	0	0	0	1	CVA report will be developed in PY2 and PY3. One of priority in PY2 is Binjai City

Indicator	LOA Target	City/District					Total	Remark
		Kota Medan	Kota Binjai	Kab. Deli Serdang	Kota Pematang Siantar	Kab. Simalungun		
Objective 3: Improved Water Resource Management to Support Resilient Drinking Water Services								
IT 3-4 (Outcome) Amount of investment mobilized for climate change adaptation as supported by USG assistance [EG.11-4]	\$10M	0	0	0	0	0	0	No target in this year, will be focused on CVA report development
IT 3-5 (Outcome) Number of institutions with improved capacity to assess/address climate change risks supported by USG assistance [EG.11-2]	100	0	2	0	0	0	2	Institutions in Binjai City will be strengthened in the process of CVA report development
IT 3-6 (Outcome) Number of people benefiting from adoption and implementation of measures to improve water resources management as a result of USG assistance [HL8.5-1]	300,000	0	0	0	0	0	0	No target in this year, will be focused on CVA report development
Objective 4: Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements in WASH and WRM								
IT 4-1 (Output) Number of people reached through SBC campaigns promoting WASH and WRM resilience	1,000,000	2,500	500	1,000	500	500	5,000	From WASH & WRM promotion through campaign event and social media

Indicator	LOA Target	City/District					Total	Remark
		Kota Medan	Kota Binjai	Kab. Deli Serdang	Kota Pematang Siantar	Kab. Simalungun		
Objective 4: Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements in WASH and WRM								
IT 4-2 (Output) 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]	5,000	10	10	10	10	10	50	Potential targets are from gender awareness integrated in WASH & WRM technical trainings and also specific gender issue trainings
IT 4-3 (Outcome) Percentage of households with soap and water at a handwashing station on premises [HL.8.2-5]	30%	0	0	0	0	0	0	This year will report baseline score and the progress will be targeted in the next program year
IT 4-4 (Outcome) Percentage 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]	20%	1%	1%	1%	1%	1%	1%	Average target from all cities/ districts

WEST JAVA/ DKI JAKARTA/ BANTEN

Indicator	LOA Target	City/District								Total	Remark	
		Kab.Bogor	Kota Depok	DKI Jakarta	Kota Tangerang	Kab. Tangerang	Kota Tangerang Selatan	Kota Pontianak	Kab. Kubu Raya			
Objective 1: Strengthened WASH and WRM Sector Governance and Financing												
IT 1-1 (Output) Number of new and/or revised laws, policies, regulations, or agreements in place that promote access to improved WASH services	65	0	1	0	0	0	0	0	0	0	1	Potential target is regulation on upgrading UPTD Status to BLUD-Sanitation in Depok City
IT 1-2 (Output) Number of public-private partnerships established with USAID support	50	0	0	0	1	0	0	0	0	0	1	Potential target is from PPP of fecal desludging truck in Tangerang City
IT 1-3 (Output) Number of social inclusion and public accountability measures implemented by supported institutions	35	0	0	0	0	0	1	0	0	0	1	New SIPA is planned to be established in Tangerang Selatan
IT 1-4 (Outcome) Value of new funding mobilized to the water and sanitation sectors as a result of USG assistance [HL.8.4-1]	\$300M	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$800,000	Amount of leveraging comes from public funding and PPP
IT 1-5 (Outcome) Change in overall budget appropriations for WASH and WRM by targeted local governments	20%	0	0	0	0	0	0	0	0	0	0	This year will report baseline score and the progress will be targeted in the next program year
IT 1-6 (Outcome) Number of institutions strengthened to manage the urban environment	100	0	0	0	0	0	0	0	0	0	0	No target in this year

Indicator	LOA Target	City/District								Total	Remark	
		Kab.Bogor	Kota Depok	DKI Jakarta	Kota Tangerang	Kab. Tangerang	Kota Tangerang Selatan	Kota Pontianak	Kab. Kubu Raya			
Objective 2: Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services												
IT 2-1 (Output) Number of WASH and WRM workers' skills and competencies improved as a result of USG assistance	5,000	30	10	10	10	10	10	10	10	10	100	Participants of skill and competency specific training on WASH & WRM
IT 2-2 (Output) Number of new financial/operational and management tools developed by service providers as a result of USG assistance	10	N/A								0	This result is applied only at national level. Potential targets are tools of MIS RPAM, WQQ, Asset Management or Sanitation SOP	
IT 2-3 (Outcome) Number of people gaining access to a safely managed drinking water services as a result of USG assistance [HL.8.1-2]	1,500,000	0	0	0	0	0	0	0	0	0	0	No target in this year because this indicator related to index progress
IT 2-4 (Outcome) Number of people receiving improved service quality from an existing basic or safely managed drinking water service as a result of USG assistance [HL.8.1-3]	N/A	N/A								N/A	No specific target for this indicator	
IT 2-5 (Outcome) Number of people gaining access to safely managed sanitation services as a result of USG assistance. [HL.8.2-3]	1,000,000	0	0	0	0	0	0	0	0	0	0	No target in this year because this indicator related to index progress

Indicator	LOA Target	City/District								Total	Remark
		Kab.Bogor	Kota Depok	DKI Jakarta	Kota Tangerang	Kab. Tangerang	Kota Tangerang Selatan	Kota Pontianak	Kab. Kubu Raya		
Objective 2: Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services											
IT 2-6 (Output) Number of cities/districts implementing improved desludging services	35	0	1	0	0	0	0	0	0	1	Potential target is desludging service improvement in Depok City
IT 2-7 (Outcome) 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]	100	0	0	0	0	0	0	0	0	0	This year will report baseline score and the progress will be targeted in the next program year
Objective 3: Improved Water Resource Management to Support Resilient Drinking Water Services											
IT 3-1 (Output) Number of WRM policies, guidance, and programs to support resilient drinking water services	60	1	0	0	0	0	0	0	0	1	In line with CVA report development, policy or guidance will be developed in Bogor District and MIS/ data management tool will be adopted by improved institution
IT 3-2 (Output) Number of institutions with management information systems and/or data management tools adopted as a result of USG assistance	40	1	0	0	0	0	0	0	0	1	
IT 3-3 (Output) Number of climate vulnerability assessment reports produced to support improvement of raw water sources of assisted PDAM	35	1	0	0	0	0	0	0	0	1	CVA report will be developed in PY2 and PY3. One of priority in PY2 is Bogor District

Indicator	LOA Target	City/District								Total	Remark	
		Kab.Bogor	Kota Depok	DKI Jakarta	Kota Tangerang	Kab. Tangerang	Kota Tangerang Selatan	Kota Pontianak	Kab. Kubu Raya			
Objective 3: Improved Water Resource Management to Support Resilient Drinking Water Services												
IT 3-4 (Outcome) Amount of investment mobilized for climate change adaptation as supported by USG assistance [EG.11-4]	\$10M	0	0	0	0	0	0	0	0	0	0	No target in this year, will be focused on CVA report development
IT 3-5 (Outcome) Number of institutions with improved capacity to assess/address climate change risks supported by USG assistance [EG.11-2]	100	2	0	0	0	0	0	0	0	0	2	Institutions in Bogor District will be strengthened in the process of CVA report development
IT 3-6 (Outcome) Number of people benefiting from adoption and implementation of measures to improve water resources management as a result of USG assistance [HL8.5-1]	300,000	0	0	0	0	0	0	0	0	0	0	No target in this year, will be focused on CVA report development
Objective 4: Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements in WASH and WRM												
IT 4-1 (Output) Number of people reached through SBC campaigns promoting WASH and WRM resilience	1,000,000	2,000	2,000	1,500	1,000	2,000	500	500	500	500	10,000	From WASH & WRM promotion through campaign event and social media

Indicator	LOA Target	City/District								Total	Remark
		Kab.Bogor	Kota Depok	DKI Jakarta	Kota Tangerang	Kab. Tangerang	Kota Tangerang Selatan	Kota Pontianak	Kab. Kubu Raya		
Objective 4: Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements in WASH and WRM											
IT 4-2 (Output) 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]	5,000	8	7	6	7	7	5	5	5	50	Potential targets are from gender awareness integrated in WASH & WRM technical trainings and also specific gender issue trainings
IT 4-3 (Outcome) Percentage of households with soap and water at a handwashing station on premises [HL.8.2-5]	30%	0	0	0	0	0	0	0	0	0	This year will report baseline score and the progress will be targeted in the next program year
IT 4-4 (Outcome) Percentage 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]	20%	1%	1%	1%	1%	1%	1%	1%	1%	1%	Average target from all cities/ districts

CENTRAL JAVA REGIONAL OFFICE

Indicator	LOA Target	City/District								Total	Remark	
		Kota Surakarta	Kab. Sukoharjo	Kab. Karanganyar	Kab. Wonogiri	Kab.Sragen	Kota Magelang	Kab. Temanggung	Kota Salatiga			
Objective 1: Strengthened WASH and WRM Sector Governance and Financing												
IT 1-1 (Output) Number of new and/or revised laws, policies, regulations, or agreements in place that promote access to improved WASH services	65	1	0	0	0	0	0	0	0	0	1	Potential target is regulation on STBM Establishment in Surakarta City
IT 1-2 (Output) Number of public-private partnerships established with USAID support	50	0	0	0	0	1	0	0	0	0	1	Potential target is from PPP of fecal desludging truck in Sragen District
IT 1-3 (Output) Number of social inclusion and public accountability measures implemented by supported institutions	35	1	0	0	0	0	0	0	0	0	1	Potential target is from drinking water and sanitation financing mechanism in Surakarta City
IT 1-4 (Outcome) Value of new funding mobilized to the water and sanitation sectors as a result of USG assistance [HL.8.4-1]	\$300M	\$400,000	\$0	\$0	\$0	\$1,300	\$0	\$0	\$0	\$0	\$401,300	Amount of leveraging comes from public funding and PPP
IT 1-5 (Outcome) Change in overall budget appropriations for WASH and WRM by targeted local governments	20%	0	0	0	0	0	0	0	0	0	0	This year will report baseline score and the progress will be targeted in the next program year
IT 1-6 (Outcome) Number of institutions strengthened to manage the urban environment	100	0	0	0	0	0	0	0	0	0	0	No target in this year

Indicator	LOA Target	City/District								Total	Remark	
		Kota Surakarta	Kab. Sukoharjo	Kab. Karanganyar	Kab. Wonogiri	Kab.Sragen	Kota Magelang	Kab. Temanggung	Kota Salatiga			
Objective 2: Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services												
IT 2-1 (Output) Number of WASH and WRM workers' skills and competencies improved as a result of USG assistance	5,000	10	10	10	10	10	10	10	10	30	100	Participants of skill and competency specific training on WASH & WRM
IT 2-2 (Output) Number of new financial/ operational and management tools developed by service providers as a result of USG assistance	10	N/A								0	This result is applied only at national level. Potential targets are tools of MIS RPAM, WQQ, Asset Management or Sanitation SOP	
IT 2-3 (Outcome) Number of people gaining access to a safely managed drinking water services as a result of USG assistance [HL.8.1-2]	1,500,000	0	0	0	0	0	0	0	0	0	0	No target in this year because this indicator related to index progress
IT 2-4 (Outcome) Number of people receiving improved service quality from an existing basic or safely managed drinking water service as a result of USG assistance [HL.8.1-3]	N/A	N/A								N/A	No specific target for this indicator	
IT 2-5 (Outcome) Number of people gaining access to safely managed sanitation services as a result of USG assistance. [HL.8.2-3]	1,000,000	0	0	0	0	0	0	0	0	0	0	No target in this year because this indicator related to index progress

Indicator	LOA Target	City/District								Total	Remark	
		Kota Surakarta	Kab. Sukoharjo	Kab. Karanganyar	Kab. Wonogiri	Kab.Sragen	Kota Magelang	Kab. Temanggung	Kota Salatiga			
Objective 2: Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services												
IT 2-6 (Output) Number of cities/districts implementing improved desludging services	35	0	0	0	0	0	0	0	0	1	1	Potential target is desludging service improvement in Salatiga City
IT 2-7 (Outcome) 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]	100	0	0	0	0	0	0	0	0	0	0	This year will report baseline score and the progress will be targeted in the next program year
Objective 3: Improved Water Resource Management to Support Resilient Drinking Water Services												
IT 3-1 (Output) Number of WRM policies, guidance, and programs to support resilient drinking water services	60	0	0	0	0	0	0	0	0	1	1	In line with CVA report development, policy or guidance will be developed in Salatiga City
IT 3-2 (Output) Number of institutions with management information systems and/or data management tools adopted as a result of USG assistance	40	0	0	0	0	0	0	0	0	0	0	No target in this year, will be focused on CVA report development
IT 3-3 (Output) Number of climate vulnerability assessment reports produced to support improvement of raw water sources of assisted PDAM	35	0	0	0	0	0	0	0	0	1	1	CVA report will be developed in PY2 and PY3. One of priority in PY2 is Salatiga City

Indicator	LOA Target	City/District								Total	Remark	
		Kota Surakarta	Kab. Sukoharjo	Kab. Karanganyar	Kab. Wonogiri	Kab.Sragen	Kota Magelang	Kab. Temanggung	Kota Salatiga			
Objective 3: Improved Water Resource Management to Support Resilient Drinking Water Services												
IT 3-4 (Outcome) Amount of investment mobilized for climate change adaptation as supported by USG assistance [EG.11-4]	\$10M	0	0	0	0	0	0	0	0	0	0	No target in this year, will be focused on CVA report development
IT 3-5 (Outcome) Number of institutions with improved capacity to assess/address climate change risks supported by USG assistance [EG.11-2]	100	0	0	0	0	0	0	0	0	2	2	Institutions in Salatiga City will be strengthened in the process of CVA report development
IT 3-6 (Outcome) Number of people benefiting from adoption and implementation of measures to improve water resources management as a result of USG assistance [HL8.5-1]	300,000	0	0	0	0	0	0	0	0	0	0	No target in this year, will be focused on CVA report development
Objective 4: Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements in WASH and WRM												
IT 4-1 (Output) Number of people reached through SBC campaigns promoting WASH and WRM resilience	1,000,000	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	20,000	From WASH & WRM promotion through campaign event and social media

Indicator	LOA Target	City/District								Total	Remark
		Kota Surakarta	Kab. Sukoharjo	Kab. Karanganyar	Kab. Wonogiri	Kab.Sragen	Kota Magelang	Kab. Temanggung	Kota Salatiga		
Objective 4: Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements in WASH and WRM											
IT 4-2 (Output) 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]	5,000	7	6	6	6	6	7	6	6	50	Potential targets are from gender awareness integrated in WASH & WRM technical trainings and also specific gender issue trainings
IT 4-3 (Outcome) Percentage of households with soap and water at a handwashing station on premises [HL.8.2-5]	30%	0	0	0	0	0	0	0	0	0	This year will report baseline score and the progress will be targeted in the next program year
IT 4-4 (Outcome) Percentage 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]	20%	1%	1%	1%	1%	1%	1%	1%	1%	1%	Average target from all cities/ districts

EAST JAVA REGIONAL OFFICE

Indicator	LOA Target	City/District										Total	Remark	
		Kota Surabaya	Kab. Sidoarjo	Kab. Gresik	Kota Malang	Kab. Malang	Kota Blitar	Kota Pasuruan	Kab. Pasuruan	Kab. Kupang	Kab. TTS			
Objective 1: Strengthened WASH and WRM Sector Governance and Financing														
IT 1-1 (Output) Number of new and/or revised laws, policies, regulations, or agreements in place that promote access to improved WASH services	65	0	0	1	0	0	0	0	0	0	0	0	1	Potential target is regulation on Equity Capital in Gresik District
IT 1-2 (Output) Number of public-private partnerships established with USAID support	50	0	0	0	0	0	0	0	0	0	0	0	0	Activity will be started with identification of funding program. No PPP target in this year
IT 1-3 (Output) Number of social inclusion and public accountability measures implemented by supported institutions	35	0	1	0	0	0	0	0	0	0	0	0	1	Potential target is from Smart City Program in Sidoarjo District
IT 1-4 (Outcome) Value of new funding mobilized to the water and sanitation sectors as a result of USG assistance [HL.8.4-1]	\$300M	\$0	\$0	\$269,350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$269,350	Amount of leveraging comes from public funding
IT 1-5 (Outcome) Change in overall budget appropriations for WASH and WRM by targeted local governments	20%	0	0	0	0	0	0	0	0	0	0	0	0	This year will report baseline score and the progress will be targeted in the next program year
IT 1-6 (Outcome) Number of institutions strengthened to manage the urban environment	100	0	0	0	0	0	0	0	0	0	0	0	0	No target in this year

Indicator	LOA Target	City/District										Total	Remark	
		Kota Surabaya	Kab. Sidoarjo	Kab. Gresik	Kota Malang	Kab. Malang	Kota Blitar	Kota Pasuruan	Kab. Pasuruan	Kab. Kupang	Kab. TTS			
Objective 2: Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services														
IT 2-1 (Output) Number of WASH and WRM workers' skills and competencies improved as a result of USG assistance	5,000	10	10	10	10	30	10	10	10	10	10	10	120	Participants of skill and competency training on WASH & WRM
IT 2-2 (Output) Number of new financial/ operational and management tools developed by service providers as a result of USG assistance	10	N/A										0	This result is applied only at national level. Potential targets are tools of MIS RPAM, WQQ, Asset Management or Sanitation SOP	
IT 2-3 (Outcome) Number of people gaining access to a safely managed drinking water services as a result of USG assistance. [HL.8.1-2]	1,500,000	0	0	0	0	0	0	0	0	0	0	0	0	No target in this year because this indicator related to index progress
IT 2-4 (Outcome) Number of people receiving improved service quality from an existing basic or safely managed drinking water service as a result of USG assistance. [HL.8.1-3]	N/A	N/A										N/A	No specific target for this indicator	
IT 2-5 (Outcome) Number of people gaining access to safely managed sanitation services as a result of USG assistance. [HL.8.2-3]	1,000,000	0	0	0	0	0	0	0	0	0	0	0	0	No target in this year because this indicator related to index progress

Indicator	LOA Target	City/District										Total	Remark
		Kota Surabaya	Kab. Sidoarjo	Kab.Gresik	Kota Malang	Kab.Malang	Kota Blitar	Kota Pasuruan	Kab. Pasuruan	Kab.Kupang	Kab. TTS		
Objective 2: Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services													
IT 2-6 (Output) Number of cities/districts implementing improved desludging services	35	0	0	0	0	0	0	1	0	0	0	1	Potential target is desludging service improvement in Pasuruan City
IT 2-7 (Outcome) 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]	100	0	0	0	0	0	0	0	0	0	0	0	This year will report baseline score and the progress will be targeted in the next program year
Objective 3: Improved Water Resource Management to Support Resilient Drinking Water Services													
IT 3-1 (Output) Number of WRM policies, guidance, and programs to support resilient drinking water services	60	0	0	0	0	1	0	0	0	0	0	1	In line with CVA report development, policy or guidance will be developed in Malang District
IT 3-2 (Output) Number of institutions with management information systems and/or data management tools adopted as a result of USG assistance	40	0	0	0	0	0	0	0	0	0	0	0	No target in this year, will be focused on CVA report development
IT 3-3 (Output) Number of climate vulnerability assessment reports produced to support improvement of raw water sources of assisted PDAM	35	0	0	0	0	1	0	0	0	0	0	1	CVA report will be developed in PY2 and PY3. One of priority in PY2 is Malang District

Indicator	LOA Target	City/District										Total	Remark	
		Kota Surabaya	Kab. Sidoarjo	Kab.Gresik	Kota Malang	Kab.Malang	Kota Blitar	Kota Pasuruan	Kab. Pasuruan	Kab.Kupang	Kab. TTS			
Objective 3: Improved Water Resource Management to Support Resilient Drinking Water Services														
IT 3-4 (Outcome) Amount of investment mobilized for climate change adaptation as supported by USG assistance [EG.11-4]	\$10M	0	0	0	0	0	0	0	0	0	0	0	0	No target in this year, will be focused on CVA report development
IT 3-5 (Outcome) Number of institutions with improved capacity to assess/address climate change risks supported by USG assistance [EG.11-2]	100	0	0	0	0	2	0	0	0	0	0	0	2	Institutions in Malang District will be strengthened in the process of CVA report development
IT 3-6 (Outcome) Number of people benefiting from adoption and implementation of measures to improve water resources management as a result of USG assistance [HL8.5-1]	300,000	0	0	0	0	0	0	0	0	0	0	0	0	No target in this year, will be focused on CVA report development
Objective 4: Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements in WASH and WRM														
IT 4-1 (Output) Number of people reached through SBC campaigns promoting WASH and WRM resilience	1,000,000	1,200	1,200	1,500	1,500	1,000	1,000	1,000	1,000	300	300	10,000	10,000	From WASH & WRM promotion through campaign event and social media

Indicator	LOA Target	City/District										Total	Remark	
		Kota Surabaya	Kab. Sidoarjo	Kab. Gresik	Kota Malang	Kab. Malang	Kota Blitar	Kota Pasuruan	Kab. Pasuruan	Kab. Kupang	Kab. TTS			
Objective 4: Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements in WASH and WRM														
IT 4-2 (Output) 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]	5,000	5	5	5	5	5	5	5	5	5	5	5	50	Potential targets are from gender awareness integrated in WASH & WRM technical trainings and also specific gender issue trainings
IT 4-3 (Outcome) Percentage of households with soap and water at a handwashing station on premises [HL.8.2-5]	30%	0	0	0	0	0	0	0	0	0	0	0	0	This year will report baseline score and the progress will be targeted in the next program year
IT 4-4 (Outcome) Percentage 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]	20%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	Average target from all cities/districts

SOUTH SULAWESI REGIONAL OFFICE

Indicator	LOA Target	City/District							Total	Remark
		Kota Makassar	Kab.Maros	Kab.Gowa	Kab. Takalar	Kab.Barru	Kota Jayapura	Kab. Jayapura		
Objective 1: Strengthened WASH and WRM Sector Governance and Financing										
IT 1-1 (Output) Number of new and/or revised laws, policies, regulations, or agreements in place that promote access to improved WASH services	65	1	0	0	0	0	0	0	1	Potential target is regulation on domestic wastewater management in PDAM Makassar City
IT 1-2 (Output) Number of public-private partnerships established with USAID support	50	0	0	0	0	0	0	0	0	Activity will be started with identification of funding program. No PPP target in this year
IT 1-3 (Output) Number of social inclusion and public accountability measures implemented by supported institutions	35	0	1	0	0	0	0	0	1	Potential target is from citizen engagement mechanism through radio in Maros District
IT 1-4 (Outcome) Value of new funding mobilized to the water and sanitation sectors as a result of USG assistance [HL.8.4-1]	\$300M	\$100,000	\$50,000	\$50,000	\$0	\$10,000	\$50,000	\$0	\$260,000	Amount of leveraging comes from public funding
IT 1-5 (Outcome) Change in overall budget appropriations for WASH and WRM by targeted local governments	20%	0	0	0	0	0	0	0	0	This year will report baseline score and the progress will be targeted in the next program year
IT 1-6 (Outcome) Number of institutions strengthened to manage the urban environment	100	0	0	0	0	0	0	0	0	No target in this year

Indicator	LOA Target	City/District							Total	Remark
		Kota Makassar	Kab.Maros	Kab.Gowa	Kab.Takalar	Kab.Barru	Kota Jayapura	Kab. Jayapura		
Objective 2: Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services										
IT 2-1 (Output) Number of WASH and WRM workers' skills and competencies improved as a result of USG assistance	5,000	10	10	30	10	10	10	10	90	Participants of skill and competency specific training on WASH & WRM
IT 2-2 (Output) Number of new financial/ operational and management tools developed by service providers as a result of USG assistance	10	N/A							0	This result is applied only at national level. Potential targets are tools of MIS RPAM, WQQ, Asset Management or Sanitation SOP
IT 2-3 (Outcome) Number of people gaining access to a safely managed drinking water services as a result of USG assistance [HL.8.1-2]	1,500,000	0	0	0	0	0	0	0	0	No target in this year because this indicator related to index progress
IT 2-4 (Outcome) Number of people receiving improved service quality from an existing basic or safely managed drinking water service as a result of USG assistance [HL.8.1-3]	N/A	N/A							N/A	No specific target for this indicator
IT 2-5 (Outcome) Number of people gaining access to safely managed sanitation services as a result of USG assistance. [HL.8.2-3]	1,000,000	0	0	0	0	0	0	0	0	No target in this year because this indicator related to index progress

Indicator	LOA Target	City/District							Total	Remark	
		Kota Makassar	Kab.Maros	Kab.Gowa	Kab. Takalar	Kab.Barru	Kota Jayapura	Kab. Jayapura			
Objective 2: Increased Access to Poor-Inclusive, Climate-Resilient, Safely Managed Drinking Water and Sanitation Services											
IT 2-6 (Output) Number of cities/districts implementing improved desludging services	35	0	0	0	0	0	0	0	0	0	No target in this year, will be focused on index
IT 2-7 (Outcome) 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]	100	0	0	0	0	0	0	0	0	0	This year will report baseline score and the progress will be targeted in the next program year
Objective 3: Improved Water Resource Management to Support Resilient Drinking Water Services											
IT 3-1 (Output) Number of WRM policies, guidance, and programs to support resilient drinking water services	60	0	0	1	0	0	0	0	0	1	In line with CVA report development, policy or guidance will be developed in Gowa District and MIS/ data management tool will be adopted by improved institution
IT 3-2 (Output) Number of institutions with management information systems and/or data management tools adopted as a result of USG assistance	40	0	0	1	0	0	0	0	0	1	
IT 3-3 (Output) Number of climate vulnerability assessment reports produced to support improvement of raw water sources of assisted PDAM	35	0	0	1	0	0	0	0	0	1	

Indicator	LOA Target	City/District							Total	Remark	
		Kota Makassar	Kab.Maros	Kab.Gowa	Kab.Takalar	Kab.Barru	Kota Jayapura	Kab. Jayapura			
Objective 3: Improved Water Resource Management to Support Resilient Drinking Water Services											
IT 3-4 (Outcome) Amount of investment mobilized for climate change adaptation as supported by USG assistance [EG.11-4]	\$10M	0	0	0	0	0	0	0	0	0	No target in this year, will be focused on CVA report development
IT 3-5 (Outcome) Number of institutions with improved capacity to assess/address climate change risks supported by USG assistance [EG.11-2]	100	0	0	2	0	0	0	0	0	2	Institutions in Gowa District will be strengthened in the process of CVA report development
IT 3-6 (Outcome) Number of people benefiting from adoption and implementation of measures to improve water resources management as a result of USG assistance [HL8.5-1]	300,000	0	0	0	0	0	0	0	0	0	No target in this year, will be focused on CVA report development
Objective 4: Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements in WASH and WRM											
IT 4-1 (Output) Number of people reached through SBC campaigns promoting WASH and WRM resilience	1,000,000	1,000	1,000	500	500	1,000	500	500	500	5,000	From WASH & WRM promotion through campaign event and social media

Indicator	LOA Target	City/District						Total	Remark	
		Kota Makassar	Kab.Maros	Kab.Gowa	Kab. Takalar	Kab.Barru	Kota Jayapura			Kab. Jayapura
Objective 4: Increased Adoption of Behaviors and Improved Women's Participation and Leadership Roles that Contribute to Improvements in WASH and WRM										
IT 4-2 (Output) 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]	5,000	8	7	7	7	7	7	7	50	Potential targets are from gender awareness integrated in WASH & WRM technical trainings and also specific gender issue trainings
IT 4-3 (Outcome) Percentage of households with soap and water at a handwashing station on premises [HL.8.2-5]	30%	0	0	0	0	0	0	0	0	This year will report baseline score and the progress will be targeted in the next program year
IT 4-4 (Outcome) Percentage 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]	20%	1%	1%	1%	1%	1%	1%	1%	1%	Average target from all cities/ districts



USAID IUWASH Tangguh

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

PROJECT YEAR 2 WORK PLAN

Attachment A

ENVIRONMENTAL MITIGATION AND MONITORING PLAN

SEPTEMBER 20, 2022

This document was produced for review by the United States Agency for International Development. It was prepared by DAI Global LLC for the USAID Indonesia Urban Resilient Water, Sanitation, and Hygiene (IUWASH Tangguh) program.

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

PROJECT YEAR I WORK PLAN

Attachment A

ENVIRONMENTAL MITIGATION AND MONITORING PLAN

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
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ACRONYMS

ADS	Automated Directives System
AKATIRTA	Akademi Teknik Tirta Wiyata/Tirta Wiyata Academy
APBD	Anggaran Pendapatan dan Belanja Daerah/Local Government Budget
APEKSI	Asosiasi Pemerintah Kota Seluruh Indonesia/Association of Indonesia's City Governments
BAPPENAS	Ministry of National Development Planning
BEO	Bureau Environmental Officer
BLUD	Badan Layanan Umum Daerah/Regional Public Service Agency
BMKG	Badan Meteorologi, Klimatologi, dan Geofisika/Indonesian Agency for Meteorological, Climatological, and Geophysics
BPDLH	Badan Pengelolaan Dana Lingkungan Hidup/Environmental Fund Management Agency
BTAM	Balai Teknologi Air Minum/Agency for Water Technology
BTS	Balai Teknik Sanitasi/Sanitation Technical Center
BUMD	Badan Usaha Milik Daerah/Regional-owned Enterprises
C/AOTR	Contracting/Alternate Agreement Officer's Technical Representative
CEM	Citizen Engagement Mechanism
COR	Contracting Officer's Representative
CSO	Civil Society Organization
CWIS	City Wide Inclusive Sanitation
DAI	DAI Global, LLC.
DCOP	Deputy Chief of Party
Dit. AM	Direktorat Air Minum/ Directorate of Water Supply
EE	Energy Efficiency
EMMP	Environmental Mitigation and Monitoring Plan
EMMR	Environmental Mitigation and Monitoring Report
EMS	Environmental Management System
ENCAP	Environmental Assessment Capacity Building Program
ERF	Environmental Review Form
ERR	Environmental Review Report
ESDM	Energi dan Sumber Daya Mineral/Energy and Mineral Resources
FAA	Foreign Assistance Act
FGD	Focus Group Discussion
FORKALIM	Asosiasi Pengelola Air Limbah Domestik/Association of Domestic Wastewater Operators
FS	Feasibility Study
FY	Fiscal Year
GCF	Green Climate Fund

GESI	Gender Equality and Social Inclusion
Godex	Governance Index
GOI	Government of Indonesia
GRBP	Gender Responsive Budgeting and Planning
HWWS	Handwashing With Soap
IPLT	<i>Instalasi Pengolahan Lumpur Tinja/Septage Treatment Plant</i>
IRIS	Integrated Resilient IUWASH Systems
IEE	Initial Environmental Examination
IUWASH Tangguh	Indonesia Urban Resilient Water, Sanitation, and Hygiene
Kemendagri	<i>Kementerian Dalam Negeri/Ministry of Home Affairs</i>
Kemenkes	<i>Kementerian Kesehatan/Ministry of Health</i>
Kemenkeu	<i>Kementerian Keuangan/Ministry of Finance</i>
KLHK	<i>Kementerian Lingkungan Hidup dan Kehutanan/Ministry of Environment and Forestry</i>
LG	Local Government
LLTT	<i>Layanan Lumpur Tinja Terjadwal/Regular Desludging Service</i>
MEO	Mission Environmental Officer
MIS	Management Information System
MOH	Ministry of Health
MPWH/MOPWH	Ministry of Public Works and Housing
NRW	Non-revenue Water
NUWSP	World Bank National Urban Water Supply Project
PBG	Performance Based Grant
PDAM	<i>Perusahaan Daerah Air Minum/Municipal Drinking Water Company</i>
PERPAMSI	National Association of Water Utilities
PIF	Partnership Innovation Fund
Pokja AMPL/PPAS	<i>Kelompok Kerja Air Minum dan Penyehatan Lingkungan/Perumahan, Permukiman, Air Minum, dan Sanitasi/Working Group for Water and Sanitation/Housing, Settlement, Water, and Sanitation</i>
PPRG	<i>Perencanaan dan Penganggaran Responsif Gender/Gender Responsive Planning and Budgeting</i>
PSDA	<i>Pengelolaan Sumber Daya Air/Water Resource Management</i>
PT SMI	PT Sarana Multi Infrastruktur/a name of a company
PYI, 2	Project Year 1, 2
REA	Regional Environmental Advisor
RPAM	<i>Rencana Pengamanan Air Minum/Water Safety Plan</i>
RPJMN	<i>Rencana Pembangunan Jangka Menengah Nasional/National Medium Term Development Plan</i>
RPJMD	<i>Rencana Pembangunan Jangka Menengah Daerah/Regional Medium Term Development Plan</i>

Sandex	Sanitation Index
SBC	Social and Behavior Change
SDG	Sustainable Development Goal
Seknas	<i>Sekretariat Nasional</i> /National Secretariat
SMDW	Safely Managed Drinking Water
SNI	<i>Standar Nasional Indonesia</i> /Indonesia National Standard
SOW	Scope of Work
SPALD	<i>Sistem Pengelolaan Air Limbah Domestik</i> /Domestic Wastewater Management System
SPAM	<i>Sistem Penyediaan Air Minum</i> /Water Supply System
SPM	<i>Standar Pelayanan Minimum</i> /Minimum Service Standards
STBM	<i>Sanitasi Total Berbasis Masyarakat</i> /Community-Based Total Sanitation
TAMIS	Technical and Administrative Management Information System
TNA	Training Needs Assessment
TOCOR	Task Order Contracting Officer's Representative
TOT	Training of Trainers
USG	United States Government
USAID	United States Agency for International Development
UPTD	<i>Unit Pelaksana Teknis Daerah</i> /Regional Technical Implementing Unit
VA	Vulnerability Assessment
WASH	Water, Sanitation, and Hygiene
WB	World Bank
WRM	Water Resource Management
ZAMP	<i>Zona Air Minum Prima</i> /Safe Drinking Water Service Area

1. 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: 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.

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 201 Climate 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:

1. 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 IMPACT (increases from top to bottom)	Low probability Low impact LOW RISK	Moderate probability Low impact LOW RISK	High probability Low impact LOW RISK
	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:

Exhibit 2. Environmental Determination for USAID IUWASH Tangguh Project Activities			
Objective	Illustrative Key Activities	Environmental Determinations	Climate Risk Rating
Objective 1: 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 Negative Determination with Condition	Low
	Outcome 2.2. Performance of drinking water and sanitation service providers increased	Categorical exclusion Negative Determination with Condition	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 Negative Determination with Condition	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 Negative Determination with Condition	Moderate

Exhibit 2. Environmental Determination for USAID IUWASH Tangguh Project Activities

Objective	Illustrative Key Activities	Environmental Determinations	Climate Risk Rating
	Outcome 3.2. Increased accountability and equity in WRM and climate-resilient WASH regulatory and management arrangements.	Categorical exclusion	Moderate
	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 data-driven 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, programmatic-level IEE conditions into specific, implementable, verifiable actions that are relevant to the activity.

4. DETAILED SCREENING OF USAID IUWASH TANGGUH PY2 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 PY2 of the project (from October 1, 2022 – September 30, 2023).

4.1. OBJECTIVE I: STRENGTHENED WASH AND WRM SECTOR GOVERNANCE AND FINANCING

4.1.1. 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

Task 1.1.1. 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. In the PY2, the team will continue to identify regulatory gaps in sanitation, water, and WRM in at the national and local levels.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Identify existing regulations and find the gaps for the basis of following activities on national and regional levels, that includes the following regulations: <ol style="list-style-type: none"> 1. Regulations of the integrated water and sanitation service institutions. 2. Regulations of WRM institution in region. 3. Regulations of the ideal institution of regionalized water supply system 4. Regulations to encourage UPTD to become BLUD, or BLUD to become BUMD 5. Regulations of value-added tax of the raw water cost PDAM. 	Categorical exclusion Negative Determination with Condition

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. In PY2, we will compile existing draft policies of WASH/WRM at national and local level.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Compile a list of existing draft policies regarding WASH/WRM at national and regional levels that includes: <ol style="list-style-type: none"> 1. Draft regulation for the WASH microfinance financing program. 2. Draft regulation for the domestic wastewater management system microfinance financing program (SPALD). 3. Draft regulation/guidelines of sanitation tariff 4. Draft regulation/guidelines for SPM implementation and monitoring tools 5. Draft regulation/ guidelines for establishing BLUD, implementation and monitoring tools 	Categorical exclusion Negative Determination with Condition

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 2, the team will engage APEKSI, Pokja AMPL, and PERPAMSI to support national and local government in program monitoring.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Engage with APEKSI to support national and local programs monitoring tools	Categorical exclusion
Engage with POKJA AMPL) at city and district level and DPD PERPAMSI	Categorical exclusion

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 1.2.1. 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. During PY2, USAID IUWASH Tangguh will develop a basic model for improved financial flow, assessment of existing financial aspects, collecting historical budget, fiscal capacity, improve the basic financial model, and trial the basic financial model with local government.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Develop the basic model for improved financial data flow	Categorical exclusion
Collect data of WASH/WRM development plan from RPJMD (sanitation/WRM) and PDAM (water) to conduct assessments of existing financial aspects using the basic model.	Categorical exclusion
Collect data of historical local budget (APBD) year 2019 to 2021 and identify the WASH and WRM allocation and conduct regional fiscal capacity assessment of the LGs and discuss with LGs	Categorical exclusion
Improve the basic model into the mWater platform and do the trial of the improved model and discussion with local governments	Categorical exclusion

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. During PY2, there are activities in facilitating local government in budget allocation, developing pre-feasibility/business plan, and connecting to financier such as PT SMI.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Facilitate local government to increase the allocation by facilitating to set the sector development plan	Categorical exclusion
Develop the financial plan of the potential selected project across the regions in the form of pre-feasibility or business plan	Categorical exclusion Negative Determination with Condition
Discuss the draft of financial plan with the local governments to include financing sources	Categorical exclusion
Connect the financiers including PT SMI to finance the projects	Categorical exclusion

Task 1.2.3. Identify financing opportunities and create pipeline of WASH-/WRM-related investments.

USAID IUWASH Tangguh will develop a pipeline of viable WASH/WRM investment opportunities by focusing on two transaction workstreams: 1) 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. During PY2, the team will compile project information from potential LG/PDAM, promote project for private investment, including market sounding, and support LG/PDAM in negotiation and agreement drafting.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Compile the project info from potential city/district or PDAM into the pipeline, simultaneously promote the project for private investment	Categorical exclusion (workshops and meetings) Negative Determination with Conditions
Facilitating for financing access that include assist for market consultation, market sounding, support in negotiation to the potential investors and assist International Draft Agreement with International Investor	Categorical exclusion (workshops and meetings) Negative Determination with Conditions

4.1.3. OUTCOME I.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. During PY2, USAID IUWASH Tangguh will revise the indices to include the WRM and GRDP, identification activities to set up the target of RPJMD in pursuing RPJMN target, development of training plan for PDAM, tariff setting, and business plan.

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
Meet with Bappenas to identify the activities of supporting LG for setting the RPJMD target to achieve the RPJMN 2020-2024 target for WASH	Categorical exclusion
Assess the local government and utilities (PDAM) capacity for the financial aspects and develop the training plan. Potential training material in area of finance will include PDAM tariff setting and business plan	Categorical exclusion

4.1.4. OUTCOME I.4. INCREASED ACCOUNTABILITY AND INCLUSIVITY IN WASH AND WRM GOVERNANCE

Task I.4.1. 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. During PY2, there some activities in refining GODEX and APBD tracking, ensuring PDAM and Sandex.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Refine GODEX and APBD tracking indicators to include accountability and gender responsiveness based on city and district contexts	Categorical exclusion
Ensure PDAM and Sanitation indices incorporate accountability and gender responsiveness terms	Categorical exclusion
Expand and scale Citizen Engagement Mechanism (CEM) for WASH/WRM sector through radio programming, civic forums, SMS gateways, customer complaint hotlines, and social media platforms. Use Panduan CEM as reference	Categorical exclusion
Develop platform innovation for data collection and visualization to improve feedback so that public can easily comment on and question decision making (identify innovation model, understand PIF mechanism, prepare SOW, bidding process, platform selection, development stage, implementation stage)	Categorical exclusion
Support BAPPENAS and Pokja PPAS/AMPL to develop and disseminate advocacy and communication materials to ensure that LG understand and commit RPJMN 2020-2024 targets through their planning process	Categorical exclusion

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. In PY2, the team will facilitate PDAM/BUMD, BTAM, dit.AM, PERPAMSI, and Akatirta in discussion of capacity building roadmap, training need assessment, and conducting the training in water. In sanitation, the team will support Directorate of Sanitation and FORKALIM in developing the grand design of sanitation capacity building, and continue support BTS in LLTT and IPLT training.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Meeting and FGD with some PDAM represent PDAM sick, un-healthy and healthy	Categorical exclusion
Conducting FGDs and meetings Road Map of Capacity Building for PDAM/BUMD with BTAM-Dit.AM MoPWH, Perpamsi and Akatirta	Categorical exclusion
Conducting FGD and meeting to identify training needs to increase the number of instructors and managers in increasing PDAM Performance and Staff skills	Categorical exclusion
Organize and implement training series packages for B-TAM and PDAMs Training Center Instructors and Managers	Categorical exclusion

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Development of grand design of sanitation capacity building with Directorate of Sanitation, BTS, and FORKALIM	Categorical exclusion
Continue support BTS in LLTT and IPLT design training	Categorical exclusion Negative Determination with Condition

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.

During PY2, water team will facilitate series of FGD and meetings for planning of collaboration to support national water grant, PBG NUWSP (NRW-EE), socialization of asset management, and training of mWater application to PDAM. Sanitation team will finalize the LLTT pocket book, collecting and analyses of safely managed sanitation data, wastewater operator, IPLT capacity, promoting PDAM in wastewater management, and improving the capacity of UPTD into BLUD.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Conducting FGDs and meetings with the Dit.AM MoPWH, regarding the planning, agenda, and forms of collaboration related to the national Water Grant program, the national program PBG-NUWSP (NRW) and EE	Categorical exclusion
Asset management socialization and training using the mWater app	Categorical exclusion Negative Determination with Condition

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Finalization and publication of pocketbook LLTT and or relevant guidelines to fecal sludge management on Tangguh website and social media	Categorical exclusion
Collecting and data analyses of safely managed sanitation coverage, existing operator of wastewater in LG, capacity of IPLT	Categorical exclusion Negative Determination with Condition
Promote PDAM to manage waste water (assessment of potential PDAM)	Categorical exclusion Negative Determination with Condition
Promoting improvement of financial efficiency of potential UPTD to become BLUD (assessment of potential UPTD)	Categorical exclusion Negative Determination with Condition
Review of sanitation governance	Categorical exclusion
Develop concept of private participation in sanitation management	Categorical exclusion

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. During PY2, water team will coordinate with MPWH in identification of site for new SPAM, conducting RPAM TOT in provincial level, procure individual consultant for RPAM national secretariat, and individual consultant for RPAM MIS review. Sanitation team will develop the sanitation resilience tools, and pilot of climate adaptation in local government.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Pra assessment and identification location of new development and improvement of SPAM with the MoPWH (one of them is the district/city involved in SPAM Regional	Categorical exclusion
Developing Tools for Water Quality Monitoring at raw water, distribution, and consumers	Categorical exclusion
Conducting the Training of Trainer RPAM for province level	Categorical exclusion Negative Determination With Condition
Procure the Individual Consultant for Water Safety Plan National Secretariat (SEKNAS RPAM) ADVISOR	Categorical exclusion
Procure the Individual Consultant for Review the MIS RPAM	Categorical exclusion

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Development of sanitation resilience tools	Categorical exclusion
Pilot of relevant climate adaptation in local government	Categorical exclusion

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. In Year 2, the water team will facilitate data collection for baseline of PDAM index, coordinating with national stakeholders in improving the PDAM performance indicators. The sanitation team will collect baseline data for sanitation index, and introduction of city wide inclusive sanitation in collaboration with the World Bank.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
PDAM Index baseline data collection	Categorical exclusion
Conduct the FGD with MoPWH (Kasubdit Wil. 3 and their staff) and other institution (Kemenkes, Kemendagri and Kemenkeu) to identify the process for develop the PDAM Performance Indicator	Categorical exclusion

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Baseline index in local government	Categorical exclusion
Facilitating development of shit flow diagram as advocacy tools for achieving SMS target and basis for CWIS introduction at local government	Categorical exclusion
In collaboration with WB to pilot CWIS assessment tools in selected cities	Categorical exclusion

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.

During PY2, we will conduct series of consultation meetings with KLHK, PSDA, and Directorate of Water Supply.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Series of stakeholders' consultation (KLHK, PSDA, Dit. AM)	Categorical exclusion

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. During PY2, USAID IUWASH Tangguh team will conduct meeting and workshop on vulnerability assessment with KLHK and BMKG.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Meetings with KLHK on VA	Categorical exclusion
KLHK's participation in workshops on VA process	Categorical exclusion
Meetings with BMKG & related agencies	Categorical exclusion
Introduction & use of mWater to capture VA's data & information	Categorical exclusion

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. In PY2, the team will assess private sector landscape, prepare the material for roadshow to private sector, roadshow to business association, and meeting with Green Climate Fund and BPDH.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Develop private sector funding identification by assessing the USAID private sector landscape assessment	Categorical exclusion
Development of materials for roadshow to private sector	Categorical exclusion
Roadshow to business association	Categorical exclusion
Meetings with GCF	Categorical exclusion
Meetings with BPDH	Categorical exclusion

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. In PY2, the team will conduct meeting with KLHK, other ministries, and private sector.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Meetings with KLHK, other ministries, and private sector (intermittent, depending on opportunity)	Categorical exclusion

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. In PY2, the team will conduct training need assessment, develop training modules, and trialing the training.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Training needs assessment (TNA)	Categorical exclusion
Development of trainings modules	Categorical exclusion
Trialing of the training	Categorical exclusion Negative Determination with Condition

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. In PY2, the team will conduct stakeholders consultation and conduct training for WRM committee.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Stakeholders consultation (with KLHK, PSDA)	Categorical exclusion
Training for WRM committee	Categorical exclusion

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. In PY2, the team will meet ministry of women’s empowerment for gender responsive budgeting consultation.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Consultation with Min. of Women’s Empowerment	Categorical exclusion

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. In PY2, the team will meet WRM agencies and BMKG for WRM information and data availability and accessibility.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Meetings with WRM agencies and BMKG	Categorical exclusion

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 2, the team will coordinate with BMKG to develop WRM data package.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Meetings with BMKG (several meetings intermittently)	Categorical exclusion
Development on packaging WRM data/information	Categorical exclusion

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. In PY2, the team will start preparation meeting with KLHK and ESDM in water monitoring plan.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Consultation meetings with KLHK and ESDM on water monitoring	Categorical exclusion

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, 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. During PY2, the team will start to discuss with KLHK, PSDA, and ESDM for preparation of WRM awareness program.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Consultation meetings with KLHK, PSDA, and ESDM	Categorical exclusion

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 watershed-level WRM.

USAID IUWASH Tangguh will engage experts to analyze existing regulation and policies regarding WRM and produce recommendations for streamlining approaches to WRM. In PY2, the team will meet WRM stakeholders and drafting recommendation for improving watershed.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Meetings with WRM stakeholders	Categorical exclusion
Drafting recommendation for streamlining policy	Categorical exclusion

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. In PY2, the team will meet KLHK, ESDM, PSDA, and other stakeholders to improve watershed management.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Meetings with KLHK, PSDA, ESDM, and other stakeholders	Categorical exclusion
Roadshow to WRM stakeholders	Categorical exclusion

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. In PY2, the team will conduct series of meetings with national stakeholders to discuss about integration of WRM into planning and budgeting.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Series of meetings with national stakeholders	Categorical exclusion
Follow meetings with KLHK and other national partners	Categorical exclusion

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. In PY2, the team will conduct formative research, develop key message, SBC strategy, and to disseminate the SBC strategy.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Formative Research	Categorical Exclusion
Development of key message and SBC strategy	Categorical exclusion
Dissemination of SBC Strategy	Categorical exclusion

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. During PY2, the team will conduct inclusive rapid assessment, develop participatory assessment, inclusive community work plan, support MOH in STBM implementation, and HWWS promotion.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Inclusive rapid assessment	Categorical exclusion
Community entry and conducting inclusive participatory assessment	Categorical exclusion
Development of inclusive community working plan	Categorical Exclusion
Support MoH for Urban STBM Implementation	Categorical exclusion
HWWS Promotion	Categorical exclusion

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. During PY2, the team will develop marketing and promotion strategy, develop sub-message for payment of watsan services, develop SBC, marketing, and promotion materials, and carry out promotion of HWWS, WASH, and WRM.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Development of marketing and promotion strategy to improve WASH services	Categorical exclusion
Development of Tetangga Panutan sub messages for payment for water and sanitation services	Categorical exclusion
Development of SBC materials	Categorical Exclusion
Development of marketing and promotion materials	Categorical exclusion
Campaign to promote HWWS, WASH and WRM	Categorical exclusion

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. In PY2, the team will identify local media channel, influencer, content creator, develop collaborative content to promote HWWS, WASH, and WRM, carry out media advocacy, and supporting citizen journalism.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
Assessment to identify local media channel, influencer dan content providers	Categorical Exclusion
Development of collaborative content to promote HWWS, WASH and WRM	Categorical Exclusion
Media advocacy	Categorical Exclusion
Citizen Journalism	Categorical Exclusion

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. In PY2, the team will conduct GESI rapid assessment, develop GESI instruments, and provide capacity building to LG and operator of water and sanitation for inclusive services.

Expected USAID IUWASH Tangguh Activities	Environmental Determination
GESI Rapid assessment	Categorical Exclusion
Dissemination of Rapid Assessment	Categorical Exclusion
Development of Gender profile	Categorical Exclusion
Development of GESI instrument	Categorical exclusion
Capacity building to improve LGs and water and sanitation operators to provide inclusive services	Categorical exclusion
Review existing GESI policy and PPRG	Categorical exclusion
Development of GRBP	Categorical exclusion
Development of Guideline of Gender Mainstreaming into WASH and WRM	Categorical exclusion

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 3 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. PY2 Environmental Mitigation and Monitoring Plan						
Activity Type	Activity Category	Task	Potential Adverse Impact	Mitigation Measures	Monitoring Indicator	Monitoring Frequency
OUTCOME 1.1 SAFELY MANAGED WASH AND WATER SECURITY POLICIES AND REGULATION CREATED OR IMPROVED, IMPLEMENTED, MONITORED AND ENFORCED AT THE NATIONAL AND LOCAL LEVELS						
Policy improvement	Technical Assistance	I.1.1: 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-1 (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

Exhibit 3. PY2 Environmental Mitigation and Monitoring Plan

Activity Type	Activity Category	Task	Potential Adverse Impact	Mitigation Measures	Monitoring Indicator	Monitoring Frequency
OUTCOME 1.2 - PUBLIC AND PRIVATE BUDGETS AND EXPENDITURES THAT PRIORITIZE EQUITABLE, GENDER RESPONSIVE, CLIMATE RESILIENT, AND SUSTAINABLE WASH AND WRM SERVICES INCREASED						
Financing	Technical Assistance	<p>1.2.2 Support financial planning and analysis at LG, PDAM, and UPTD service provider levels.</p> <p>1.2.3 Identify financing opportunities and create pipeline of WASH-/WRM-related investments.</p>	It is potential to develop the FS or business plan of the project that have adverse impact to the environment such as development of IPLT	USAID IUWASH Tangguh will make sure that local government will follow the environmental law on environmental impact assessment	IT 1-4 Dollar mobilized to the water and sanitation as result of USG assistance	Annual
OUTCOME 2.1 - CAPACITY OF PROFESSIONALIZED WASH AND WRM WORKFORCE INCREASED						
Capacity building	Training	2.1.1 - Apply workforce development framework to support service providers.	The training will be conducted in class and outdoor. For the outdoor training there is potential adverse impact both to the participants and to the environment.	For the outdoor training, USAID IUWASH Tangguh will make sure that the training will follow safety procedures	IT 2.1 WASH/WRM workers with improved skills	Quarterly
OUTCOME 2.2 - PERFORMANCE OF DRINKING WATER AND SANITATION SERVICE PROVIDERS INCREASE						
Capacity building	Training	2.2.1 - Develop portfolio approaches to improving operational and financial efficiencies.	The training will be conducted in class and outdoor. For the outdoor training there is potential adverse impact both to the participants and to the environment.	For the outdoor training, USAID IUWASH Tangguh will make sure that the training will follow safety procedures	Water and sanitation services sector institution strengthened to managed waterresources or water supply and sanitation services as a result of USG assistance	Annual

Exhibit 3. PY2 Environmental Mitigation and Monitoring Plan

Activity Type	Activity Category	Task	Potential Adverse Impact	Mitigation Measures	Monitoring Indicator	Monitoring Frequency
OUTCOME 2.3 - CITY-WIDE INCLUSIVE, CLIMATE-RESILIENT, AND FINANCIALLY VIABLE WASH AND WRM INSTITUTIONAL ARRANGEMENTS AND SERVICE MODELS ESTABLISHED AND EXPANDED						
Capacity building	Training	2.3.1. Expand menu of service model options for PDAM and LG integration and adoption	RPAM training will be conducted in class and outdoor to visit intake, transmission line, production unit, distribution system, and house connection to exercise the modules of RPAM in the field.	The outdoor activities will risk the system and the participants themselves, for instance the river intake usually located in riverbank that not easy to access, so it will need safety tools and procedure to be followed	IT 2.3 Number of people gaining access to SMDW services as a result of USG assistance	Annual
OUTCOME 3.1 - IMPROVED WATER QUALITY, QUANTITY, AND RELIABILITY IN WATERSHEDS WHICH SUPPLY RAW WATER FOR DRINKING WATER SERVICES						
Capacity Building	Training	3.1.5. Build capacity of local workforce to carry out watershed management activities such as construction of infiltration wells, improved sloping land management	The training of infiltration pond and gabion installation will mostly in the field that have potential hazard to the environment and the participants	USAID IUWASH Tangguh will make sure that the training will be conducted following the safety tools and procedures	IT 3-5 Institutions with improved capacity to assess and address climate change risk supported by USG assistance	Quarterly

Exhibit 4. PY2 Climate Risk Mitigation Plan

Task	Climate Risk	Opportunity	Climate Risk Management Options	Risk Addressing Activities	Project Implementation
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	Floods (from stronger storms, inadequate waste management, and poor maintenance of	Improve water and sanitation infrastructure and infrastructure services by	Design urban WASH investments to “reach”	Identify changes in demographics, urbanization, and land use	Climate consideration in the delivery of technical assistance and infrastructure siting during

Exhibit 4. PY2 Climate Risk Mitigation Plan

Task	Climate Risk	Opportunity	Climate Risk Management Options	Risk Addressing Activities	Project Implementation
<p>PDAM and LG integration and adoption.</p>	<p>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</p> <ul style="list-style-type: none"> • 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 caused by sea level rise. • Reduced access of marginalized populations to sanitation infrastructure due 	<p>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.</p> <ul style="list-style-type: none"> • 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. 	<p>more individuals potentially affected by climate change.</p> <ul style="list-style-type: none"> • 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 	<p>that could dictate a shift in WASH investments, particularly in the face of the exacerbating influence of climate change.</p> <ul style="list-style-type: none"> • Identify and prioritize technologies for water-related adaptation. • Improve design and construction of water supply and sanitation infrastructure to account for the potential for climate-related risks. • Improve water storage, conservation, and water demand management to account for climate-driven changes in supply and demand. 	<p>activity and project level implementation, reflected in the activity design and its associated environmental procedures and climate risk assessment</p>

Exhibit 4. PY2 Climate Risk Mitigation Plan

Task	Climate Risk	Opportunity	Climate Risk Management Options	Risk Addressing Activities	Project Implementation
	<p>to flooding and extreme storm events.</p> <ul style="list-style-type: none"> • High levels of suspended sediments, potentially exceeding water treatment capacity, due to flood waters. • Higher pollutant concentrations in surface waters and reduced efficiency of sanitation systems due to prolonged drought. • Lack of willingness to shift to piped water, potentially from insufficient raw water supplies, and continued use of groundwater based on failures of events 				
OUTCOME 3.1 IMPROVED WATER QUALITY, QUANTITY, AND RELIABILITY IN WATERSHED WHICH SUPPLY RAW WATER FOR DRINKING WATER SERVICES					
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 GoI, 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.	<p>Invest In Climate-Related Information Collection and Management Systems.</p> <ul style="list-style-type: none"> • Strengthen climate information systems, building on existing regional and national networks. • Build capacity of national governments to harmonize data across regions. 	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 3.1.4: Implement and manage protection	Watershed management and water services in Indonesia are prone to floods, droughts,			Collaborate with local stakeholders and enterprises to monitor	Implement activities in watersheds, including in water catchment areas for springs to

Exhibit 4. PY2 Climate Risk Mitigation Plan

Task	Climate Risk	Opportunity	Climate Risk Management Options	Risk Addressing Activities	Project Implementation
measures for watershed catchment areas to conserve biodiversity and water sources and improve sustainable water services.	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 style="list-style-type: none"> Build relevant national and/or regional research programs on the links between climate and water supply and sanitation (e.g., vulnerability index). 	groundwater levels and to attract climate financing and community buy in to implement the activities.	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.			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 EXPANDED INFORMATION, ANALYSIS, AND ADVOCACY FOR CLIMATE-RESILIENT DECISION MAKING IN POLICY, PROGRAMS, AND OPERATIONS					
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 style="list-style-type: none"> Invest In Climate-Related Information Collection and Management Systems. Strengthen climate information systems, building on existing regional and national networks. Build capacity of national governments to 	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. PY2 Climate Risk Mitigation Plan

Task	Climate Risk	Opportunity	Climate Risk Management Options	Risk Addressing Activities	Project Implementation
			<ul style="list-style-type: none"> harmonize data across regions. Build relevant national and/or regional research programs on the links between climate and water supply and sanitation (e.g., vulnerability index). 		
OUTCOME 3.4. STRENGTHENED NATIONAL AND SUB-NATIONAL GOI WRM POLICY, GUIDANCE, AND PROGRAM TO SUPPORT RESILIENT DRINKING WATER SERVICES					
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 GoI, 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 style="list-style-type: none"> Build capacity of national governments to harmonize data across regions. Build relevant national and/or regional research programs on the links between climate and water supply and sanitation (e.g., vulnerability index). 	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 USE, MAINTENANCE, AND DESLUDGING BEHAVIOR ADOPTED AND BECOME SOCIAL REGULATED NORM					
Task 4.1.1: Develop SBC strategies targeted to sustainable sanitation systems.	<ul style="list-style-type: none"> Reduced participation in sanitation and hygiene training and awareness-raising especially for women due to community disruption and dislocation due to flooding, 	<ul style="list-style-type: none"> Reduce gender inequalities through efforts to increase of sanitation systems can support women in maintaining sanitary household conditions and reducing disease in 	<ul style="list-style-type: none"> Deliver social behavior change to improve public education and outreach efforts related to the importance of safe sanitation services to reduce the methane 	<ul style="list-style-type: none"> Develop social behavior change for water security, sanitation and hygiene at the household, WASH institutional and local business levels to 	<ul style="list-style-type: none"> Incorporate climate change assessment into activity planning and implementation. Climate consideration in the delivery of social behavior change for sustainable

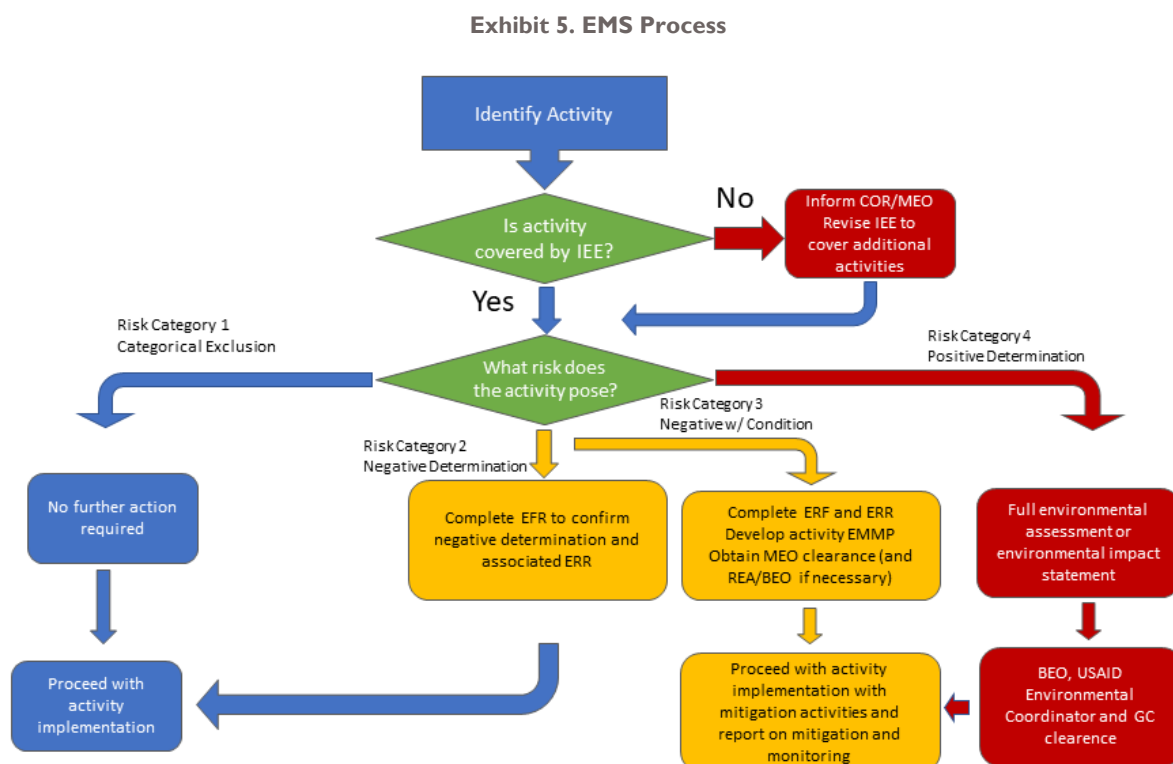
Exhibit 4. PY2 Climate Risk Mitigation Plan

Task	Climate Risk	Opportunity	Climate Risk Management Options	Risk Addressing Activities	Project Implementation
	<p>sea level rise, and extreme events.</p> <ul style="list-style-type: none"> 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. 	<p>themselves and their families.</p> <ul style="list-style-type: none"> Improved behaviors by making sanitation systems more resilient to future climate variability and change may also yield immediate results by addressing insufficient sanitation infrastructure 	<p>emission from unmanaged wastewater, and other factors relevant to sanitation-related climate impacts and adaptation.</p>	<p>prevent inundation and overflow of latrines and septic systems caused by increased precipitation and storm events.</p> <ul style="list-style-type: none"> 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 	<p>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</p>

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 5 below shows the EMS process, and the steps the USAID IUWASH Tangguh team will follow in complying with USAID’s Regulation 216 requirements.



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 1, 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.
Step 2.2	Monitor implementation of mitigation measures as described in the activity EMMP.
Step 2.3	Periodic review of implementation of mitigation measures.
Step 2.4	Activity EMMP Report filled. Reported to USAID quarterly while activities are 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-1 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 6 below.

Exhibit 6. Roles and Responsibilities		
Person(s) responsible	Schedule	Tasks
Regional Managers		<ul style="list-style-type: none"> Screening all proposed activities in their respective districts and cities during the initial planning staff to identify any potential environmental impacts. Completing the Environmental Review Forms (ERF) and with support from the Jakarta technical teams, define needed mitigation measures for low-risk and moderate risk activities. Reviewing the implementation of mitigation measures by local partners and the project to improve performance and conducting periodic site visits. Drafting required monitoring reports and participating in periodic reviews of compliance with USAID environmental policy. Tracking ongoing activities and archiving completed activities using the Environmental Compliance module in TAMIS.
DCOP - Technical		<ul style="list-style-type: none"> Supporting Regional Managers during the initial review of planned activities to ensure that activities rated as low-risk and moderate-risk are properly identified and have completed ERFs. Participate in periodic reviews of USAID IUWASH Tangguh supported activities to ensure that field teams are following project environmental review, mitigation and monitoring guidelines. Conduct periodic site visits and ensure compliance. Mobilize technical expertise to support Regional Specialists and Regional Managers in their review of planned activities and development of mitigation and monitoring activities. Lead assessments of potential national implementing partners and grantees in terms of their internal environmental review, mitigation and monitoring processes.

Exhibit 6. Roles and Responsibilities

Person(s) responsible	Schedule	Tasks
Urban Sanitation Specialist (EMMP Focal Point)		<ul style="list-style-type: none"> Periodically update the environmental mitigation and monitoring plan for all activities in the region Ensure that all activities are comply with USAID environmental safeguard with monitoring of all activities in TAMIS Regularly check TAMIS to make sure that all activities have filled the environmental compliance section, either categorical exclusion or negative determination activities. Provide input of environmental compliance activity progress for bi-weekly, quarterly, and annual report Conduct regular meetings with environmental compliance person in charge in all regions for updating environmental safeguard related issues Conducting field visit to check compliance in the field especially for negative determination with condition activities
Technical, Objective 2 Sanitation and Hygiene Service Leads		<ul style="list-style-type: none"> Support Urban Sanitation Specialist (EMMP Focal point) in ensuring that all activities are comply with USAID environmental safeguard Support EMMP Focal Point in TAMIS checking
USAID TOCOR		<ul style="list-style-type: none"> Periodic site visits Oversee project activities and monitor EMMP 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
Individual contact and title	Address, phone & email (if available)
Proposed Sub-award (brief description)	Amount of funding requested
	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.						

*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) _____ (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 re-design, an IEE or EA.

Clearance record

C/AOTR <input type="checkbox"/> Clearance given <input type="checkbox"/> Clearance denied	(print name)	(signature)	(date)
USAID/Indonesia MEO <input type="checkbox"/> Clearance given <input type="checkbox"/> Clearance denied	(print name)	(signature)	(date)
Regional Env. Advisor (REA) <input type="checkbox"/> Clearance given <input type="checkbox"/> Clearance denied	(print name)	(signature)	(date)

Bureau Env. Officer (BEO)*	(print name)	(signature)	(date)
<input type="checkbox"/> Clearance given <input type="checkbox"/> 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 1. 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.

<p>Very low-risk activities (Activities with low potential for adverse biophysical or health impacts; including §216.2(c)(2))</p>	<p>High-risk activities (Activities with high potential for adverse biophysical or health impacts; including §216.2(d)(1))</p>
<p>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, for which the answer to ALL SUPPLEMENTAL SCREENING QUESTIONS is “NO.”</p>	<p>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 restricted use pesticides, or wide-area application in non-emergency conditions under non-supervised conditions. (Consult MEO.) Light industrial plant production or processing (e.g., sawmill operation, agro-industrial processing of forestry products, tanneries, cloth-dyeing 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:</p> <ul style="list-style-type: none"> ▪ 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 non-degraded 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	
<p>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.</p>	
<p>Small-scale agriculture, NRM, sanitation, etc. (You may wish to define what “small scale” means for each activity)</p> <p>Agricultural experimentation. Controlled and carefully monitored agricultural experimentation exclusively for the purpose of research and field evaluation of MORE than 4 ha.</p> <p>NOTE Biotechnology/GMOs: No <i>biotechnology testing or release</i> of any kind are to take place within an assisted country until the host countries involved have drafted and <i>approved</i> a regulatory framework governing biotechnology and biosafety.</p> <p>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.</p> <p>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.)</p> <p>Rural roads. Construction or rehabilitation of rural roads meeting the following criteria:</p> <ul style="list-style-type: none"> ▪ 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 from the road and not affected by construction or changes in drainage. 	<p>Sampling. Technical studies and analyses or similar activities that could involve intrusive sampling, of endangered species or critical habitats. (Includes aerial sampling.)</p> <p>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.</p> <p>NOTE: USAID guidance on water quality requires testing for arsenic, nitrates, nitrites and coliform bacteria.</p> <p>Support for intermediate credit institutions when indirect environmental harm conceivably could result.</p> <p>Institutional support grants to NGOs/PVOs when the activities of the organizations are known and may reasonably have adverse environmental impact.</p> <p>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.</p> <p>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)].</p> <p>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</p>

Common examples of moderate-risk activities	
<p>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.</p>	
<ul style="list-style-type: none"> ▪ No protected areas or relatively undegraded forests are within 5 km of the road. <p>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).</p> <p>Quantity imports of commodities such as fertilizers</p>	<p>waste (esp. HIV/AIDS) is produced, syringes are used, or blood is tested.</p>

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.

- i. 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.
- ii. If ANY activities are “unknown or moderate risk,” you MUST complete an ENVIRONMENTAL REVIEW REPORT addressing these activities. Proceed to Step 5.
- iii. If ANY activities are “high risk,” note that USAID’s regulations usually require a full 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

- i. 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.encapafrika.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.)

- ii. Assess the extent to which these *potential* impacts and concerns are significant in the context of the specific activity design and site.
- iii. 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.encapafrika.org/egssaa.htm.) Cite this or other guidance used for mitigation design.

- iv. 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
<p>The seasonal stream running through the plot drains an area of at least 2 km² to the WNW.</p> <p>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.</p>	<p>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.</p> <p>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.</p>	<p>Per analysis at left, this potential impact is not significant, so long as the following mitigations are implemented:</p> <ol style="list-style-type: none"> 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.encapafrika.org/meoEntry.htm

F. 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 /subgrant (brief description)		Amount of funding requested	
		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.						

*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) _____ (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 re-design, an IEE or EA.

Clearance record

C/AOR <input type="checkbox"/> Clearance given <input type="checkbox"/> Clearance denied	(print name)	(signature)	(date)
USAID/Indonesia MEO <input type="checkbox"/> Clearance given <input type="checkbox"/> Clearance denied	(print name)	(signature)	(date)
Regional Env. Advisor (REA) <input type="checkbox"/> Clearance given <input type="checkbox"/> Clearance denied	(print name)	(signature)	(date)
Bureau Env. Officer (BEO)* <input type="checkbox"/> Clearance given <input type="checkbox"/> Clearance denied	(print name)	(signature)	(date)

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.

