

Annexes

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ANNEX 1

Initial Environmental Examination



Initial Environmental Examination

March 2020

Philippines: Water District Development Sector Project

METRO KIDAPAWAN WATER DISTRICT

Prepared by Metro Kidapawan Water District for the Local Water Utilities Administration
and the Asian Development Bank.



CURRENCY EQUIVALENTS

(as of 20 March 2020)

Currency unit	–	peso (Php)
Php1.00	=	\$0.01955
\$1.00	=	Php 51.15

ABBREVIATIONS

ADB	–	Asian Development Bank
APs	–	Affected Persons
AWWA	–	American Water Works Association
BHS	–	Barangay Health Stations
BMB	–	Biodiversity Management Bureau
CADT	–	Certificate of Ancestral Domain
CALT	–	Certificate of Ancestral Land Title
CBMF	–	Community Based Management Forest
CCC	–	Climate Change Commission
CEMP	–	Contractor's Environmental Management Plan
CNC	–	Certificate of Non- Coverage
COTELCO	–	Cotabato Electric Cooperative
DAO	–	Department Administrative Order
DAR	–	Department of Agrarian Reform
DED	–	Detailed Engineering Design
DENR	–	Department of Environment and Natural Resources
DOH	–	Department of Health
DPWH	–	Department of Public Works and Highways
ECA	–	Environmentally Critical Areas
ECC	–	Environmental Compliance Certificate
EHS	–	Environmental, Health and Safety
EIA	–	Environmental Impact Assessment
EMB	–	Environmental Management Bureau
EMB-RO	–	Environmental Management Bureau–Regional Office
EMP	–	Environmental Management Plan
FPIC	–	Free, Prior, and Informed Consent
GIIP	–	Good International Industry Practice
GOCC	–	Government Owned and Controlled Corporation
GRM	–	Grievance Redress Mechanism
IEE	–	Initial Environmental Examination
IFC	–	International Finance Corporation
KBA	–	Key Biodiversity Area
LGUs	–	Local Government Units
LWUA	–	Local Water Utilities Administration
MANP	–	Mount Apo Natural Park
MC	–	Memorandum Circular
MKWD	–	Metro Kidapawan Water District
MOA	–	Memorandum of Agreement
NAAQGV	–	National Ambient Air Quality Guideline Values
NCIP	–	National Commission on Indigenous Peoples
NIPAS	–	National Integrated Protected Areas System
NRW	–	Non-Revenue Water
NSCP	–	National Structural Code of the Philippines
NWRB	–	National Water Resources

PAGASA	–	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PAMB	–	Protected Area Management Board
PD	–	Presidential Decree
PEISS	–	Philippine Environmental Impact Statement System
PIU	–	Project Implementation Unit
PMU	–	Project Management Unit
PNSDW	–	Philippine National Standards for Drinking Water
PPC	–	Price and Physical Contingency
PPE	–	Personal Protective Equipment
PSA	–	Philippine Statistics Authority
PTO	–	Permit to Operate
RA	–	Republic Act
REA	–	Rapid Environmental Assessment
SDGs	–	Sustainable Development Goals
SPS	–	Safeguard Policy Statement
SPZ	–	Special Protection Zone
TSP	–	Total Suspended Particulates
UNDP	–	United Nations Development Program
WD	–	Water District
WDDSP	–	Water District Development Sector Project
WDGRC	–	Water District Grievance Redress Committee

WEIGHTS AND MEASURES

ha	–	Hectare
Hp	–	Horsepower
km	–	Kilometer
km ²	–	Square kilometer
Lps	–	Liters per second
lm	–	Meter
m	–	Meter
m ²	–	Square meter
m ³	–	Cubic meter
mamsl	–	Meters above mean sea level
mm	–	Millimeter

NOTE

In this report, "\$" refers to US dollars.

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EXECUTIVE SUMMARY

1. *Introduction.* Metro Kidapawan Water District (MKWD) is an operational water supply utility located in Kidapawan City, North Cotabato, Republic of the Philippines and one of the selected subprojects under the PHI: Water District Development Sector Project (WDDSP) funded by the Asian Development Bank (ADB). The project intends to improve the livability and competitiveness in urban areas outside Metro Manila through the provision of better water supply and sanitation infrastructure and services to a number of water districts (WDs). The Local Water Utilities Administration (LWUA) is the executing agency. The participating WDs, in this case MKWD, are the implementing agencies for water supply and sanitation subprojects.

2. *Subproject Description.* The proposed subprojects aims to improve/upgrade the MKWD water supply system to address the present demand for a potable water and alleviate the shortage of water. MKWD Water Supply Improvement Project includes source development, pumping facilities, treatment facilities, storage and other facilities, pipelines and appurtenances, lot acquisition, solar power facilities and construction of different facilities. The project estimated cost is Php 561,000,000.

3. *Legal Framework.* The policy, legal, and administrative frameworks relevant to the environmental assessment of water supply and sanitation projects in the Philippines have long been established by the following laws and regulations: (i) Presidential Decree (PD) 198- Provincial Water Utilities Act of 1973, (ii) PD 1586 – Establishing the Philippine Environmental Impact Statement System, (iii) DOH AO 2017-010 – Philippine National Standards for Drinking Water (PNSDW) of 2017, (iv) PD 1067 – Water Code of the Philippines, (v) PD 856 – Code on Sanitation of the Philippines, (vi) Republic Act (RA) No. 9275 - Philippine Clean Water Act of 2004, (vii) DENR AO 2016-08 – Water Quality Guidelines and General Effluent Standards of 2016, (viii) PD 705 – Forestry Reform Code of the Philippines; and (ix) RA 11058 – Occupational Safety and Health Standards,

4. *Environmental Safeguard.* All ADB funded project are required to strictly comply with Philippine government's environmental laws and requirements as well as ADB's Safeguard Policy Statement of 2009 (SPS). MKWD was assessed under Category B that deemed by ADB to have some adverse environmental impacts, but of lesser degree or significance. Preparation of Initial Environmental Examination (IEE) report and securing ECC were required to prevent the possible adverse environmental and public health impact. The MKWD is currently on the process of completing all the documentary requirements for the acquisition of the ECC. Documents such as land titles and Memorandum of Agreements (MOA) for the property lots to be acquired are being completed, thus, online ECC application is not yet initiated. Construction will not be started until the ECC has been obtained.

5. *Environmental and Socioeconomic Conditions.* The proposed site for the Notongon Source development is located in Brgy. Buhay, Makilala and is under the ancestral domain of the Manobo tribe. Matiboggo source is located in Brgy. Buena Vida and is also under the same ancestral domain. Meanwhile, the three (3) proposed groundwater facilities are located in Brgy. Manubuan, Matalam, Brgy. Kalaisan, Kidapawan City, and Brgy. Bulacan, Makilala. Series of consultations and Free, Prior, and Informed Consent (FPIC) meetings were conducted for the proposed source development project. Well drilling, pumping facilities, reservoirs and different facilities will be constructed in either land already owned by MKWD or land that will be acquire via negotiated settlement. Pipe laying will be done in road right-of-way.

6. Based on the Philippine Statistics Authority (PSA), the estimated population of the project area in 2015 is about 352,608 spread across 144 barangays. Considerable socio-

economic growth in the municipalities gradually increase from time to time noting their significant achievements such as construction and improvement of farm to market roads and bridges, rehabilitation of municipal buildings, construction of additional school building and other public buildings.

7. *Impacts and EMP.* Anticipated impacts to be considered were assessed through the following activities: (i) gathering of inputs from interested and affected parties; (ii) desk research of information relevant to the proposed project; (iii) site visit and professional assessment; and (iv) evaluation of proposed design and potential impacts. Categorization of the project and formulation of mitigation measures have been guided by ADB's REA Checklist for Water Supply and SPS. Results of the environmental impacts screening shows that the impact types and magnitudes for both positive and negative impacts without the mitigating measures and the resulting situations when mitigating measures will be implemented.

8. During pre-construction phase, potential nuisances and problems to the public during construction shall be addressed by inclusion in the tender documents of specific provisions addressing these issues. There are no known archaeological and cultural assets in these proposed sites. Nevertheless, precautions will be taken to avoid potential damage to any archaeological and cultural assets by inclusion of provisions in tender and construction documents requiring the contractors to immediately stop excavation activities and promptly inform the authorities if archaeological and cultural assets are discovered.

9. The proposed project will not entail any involuntary resettlement and there are no adverse impacts on surrounding structures since the location of proposed project components is either already acquired by MKWD or will be acquire via negotiated settlement. MKWD will also acquire water rights of all the wells and the spring source from the National Water Resources Board (NWRB) which will ensure that water resources are properly allocated.

10. Adverse environmental impacts during construction are temporary, less than significant and can easily be mitigated. There will be no massive construction activities that can damage the environment. Typical construction issues are manageable with the implementation of environmental management plan for (i) erosion and sediment runoff, (ii) noise and dust, (iii) vehicular traffic, (iv) construction wastes, (v) oil and fuel spillages, (vi) construction camps, and (vii) public safety and convenience.

11. Environmental problems due to operation of the proposed water supply can be avoided by incorporating the necessary measures in the design and use of appropriate operational procedures. MKWD shall ensure that the potable water consistently passes the requirements of the Philippine National Standards for Drinking Water (PNSDW) of 2017. To achieve this, implementation of the water safety plan with regular water quality monitoring shall be undertaken.

12. An Environmental Management Plan (EMP) is developed to effectively manage the environmental issues. This includes: (i) mitigating measures to be implemented, (ii) required monitoring associated with the mitigating measures, and (iii) implementation arrangement. Institutional set-up is presented in the implementation arrangement and discusses the roles during implementation and the required monitoring. It also outlines the requirements and responsibilities during pre-construction, construction, and operation phases.

13. *Public Consultation and Information Disclosure.* A stakeholder consultation and participation were implemented as part of the preparation and implementation strategy. This were done to address the stakeholders' needs and disclosure of the project details and the benefits they shall receive. The consultation process during the project preparation has

solicited inputs from a wide range of stakeholders, including government officials, residents in the vicinity of the subproject sites, marginalized/vulnerable beneficiary groups, and project affected persons (APs). MKWD as proponent conducted several public consultation on utilization of Notongon Source for Level III Water System on 13 and 20 June 2019, 6 August 2019, 9 September 2019 and 10 October 2019 in Makilala and Kidapawan City. Meeting with Matiboggo Claimants is also conducted on 28 April 2020.

14. *Grievance Redress Mechanism.* A common grievance redress mechanism (GRM) will be established at the MKWD to receive, evaluate, and facilitate the resolution of affected persons (APs) concerns, complaints, and grievances about the social and environmental performance related to the various subprojects. The GRM will aim to provide a time-bound and transparent mechanism to voice and resolve social and environmental concerns linked to the subproject. This mechanism shall be disclosed in public consultations during detailed design and in meetings during the construction phase.

15. The MKWD will maintain a full record of all complaints and grievances received, and the actions taken. MKWD will also ensure grievances are recorded and reported in the Integrated Environmental and Social Safeguards reports that are submitted to ADB every 6 months during project implementation. All costs involved in resolving the complaints (meetings, consultations, communication, and information dissemination) will be borne by MKWD. Complaints about environmental performance of projects issued an Environmental Certificate of Compliance (ECC) can also be brought to the attention of DENR-EMB. The process of handling such complaints is described in the Revised Procedural Manual (2007) for the IRR of PD 1586.

16. *Conclusion and Recommendations.* MKWD's water supply subproject will benefit the general public by contributing to the long-term improvement in the water supply system of the project coverage area and providing safe drinking water to residents and commercial establishments in the municipality. The potential adverse environmental impacts are primarily associated with the construction period, which can be minimized through mitigating measures and environmentally sound engineering and construction practices.

17. With the implementation of the mitigation measures as proposed in the EMP, the subproject is not expected to cause irreversible adverse environment impacts. Also, the water supply subproject can be implemented in an environmentally acceptable manner without the need for further environmental assessment study, except for the conduct of a public consultations for compliance and further input. Should there be any significant change in the project scope, an updated or a new IEE will be prepared.

18. The proposed MKWD subproject is hereby recommended for implementation with the following requirements to be strictly followed: (i) Tendering process shall ensure environmentally responsible procurement by requiring the inclusion of EMP provisions in the bidding and construction contract documents; (ii) Contractor's submittal of a CEMP which shall be included in the construction contract; (iii) Contract provisions on creation and operation of the WDGRC shall be included in construction contracts; (iv) LWUA, with its regulatory function, shall ensure that capability building for MKWD shall be pursued; and (v) MKWD shall continue the process of public consultation and information disclosure during detailed design and construction phases.

1 INTRODUCTION

The Metro Kidapawan Water District (MKWD) was formed on December 14, 1976 through Sangguniang Panlalawigan of North Cotabato Resolution No. 112 series of 1976 with the initiative and instigation of former Gov. Carlos B. Cajelo.

Currently, MKWD has six (6) spring sources and one (1) surface water source serving about 46.53% of its service area of coverage.

The proposed projects aim to provide additional water source which will increase the water production by 90 lps (70 lps from Matiboggo Spring Source and 20 lps from Notongon Spring Source). Through this project, MKWD will be able to extend its utility services to four (4) barangays in Makilala, North Cotabato namely, Buhay, Garsika, New Cebu and Buena Vida.

Upon the completion of the proposed project, a projected additional service connection of 6,000 is expected by the year 2021 with an annual growth of 1.5%.

The project can contribute to the Philippines' efforts in achieving the Sustainable Development Goals (SDGs) given by the United Nations Development Program (UNDP), specifically the SDG No. 6, which is the "Clean Water and Sanitation". The project shall address the increasing water demand of the municipality while balancing out the climate change affects that is observed, though increasing the community's resilience.

This is part of the Water District Development Sector Project (WDDSP) which is funded by the Asian Development Bank (ADB). All ADB-funded projects are required to comply with the Philippine government's environmental laws and requirements as well as ADB's Safeguard Policy Statement of 2009 (SPS). A preliminary environmental assessment using ADB's Rapid Environmental Assessment (REA) Checklist for Water Supply (**Annex 1**) was employed and this project is classified environment Category B and warrants the preparation of this Initial Environmental Examination (IEE) Report. Under the Philippine Environmental Impact Statement System (PEISS), an online Environmental Compliance Certificate (ECC) application is required for water supply projects with water source, treatment facilities, and Level III distribution system. An IEE Checklist Report may be required which is under the discretion of the EMB-RO. The MKWD is currently on the process of completing all the documentary requirements for the acquisition of the ECC for both Notongon Spring Source Development and Matiboggo Spring Source Development. Online ECC application is not yet initiated. Construction will not be started until the ECC has been obtained.

The SPS of 2009 integrates the three operational safeguard policies of ADB on the environment, involuntary resettlement, and indigenous peoples, into a unified policy framework. ADB shall work with borrowers to implement the provisions of this policy framework in the form of project review and supervision, and capacity development support. The SPS also promotes participation of project-affected people and key stakeholders in project design and implementation.

The provisions of the ADB SPS of 2009 were carefully observed during the preparation of this report. This IEE Report is prepared to meet the following objectives:

- (i) Provide a clear description of the proposed projects and all its components;
- (ii) To present the national and local legal and institutional framework within which the environmental assessment has been carried out;

- (iii) To provide information on the existing geographic, ecological, environmental, and social conditions, within the project's area of influence;
- (iv) To assess the project's likely positive and negative direct and indirect impacts on physical, biological, socioeconomic, and physical cultural resources in the project's area of influence;
- (v) To present the set of mitigation measures to be undertaken to avoid, reduce, mitigate, and manage adverse environmental impacts;
- (vi) To describe the process undertaken during project design to engage stakeholders, the planned information disclosure measures, and the process for carrying out consultation with affected people and facilitating their participation during project implementation;
- (vii) To describe the project's grievance redress mechanism for resolving project-related complaints;
- (viii) To describe the monitoring measures and reporting procedures to ensure early detection of conditions that necessitate particular mitigation measures; and
- (ix) To identify who is responsible for carrying out the mitigation and monitoring measures.

The development of this IEE is based on several field visits, review of secondary data, consultation with the Local Government Units (LGUs), officials of MKWD, and the stakeholders from the community.

2 POLICY, LEGAL, AND ADMINISTRATIVE FRAMEWORK

The ADB, in its operations, requires the consideration of environmental issues in all aspects. The requirement of having an environmental assessment in all of ADB's project loans, program loans, sector loans, sector development program loans, loans involving financial intermediaries, and private sector loans is stated in the SPS.

Screening and categorization. Projects are screened to identify their expected environmental impacts which are related to the type and location of the project; the sensitivity, scale, nature, and magnitude of its potential impacts; and the availability of cost-effective mitigation measures. This will determine the category of environmental assessment required for the project. Projects are categorized in the following four (4) categories:

- (i) Category A. Projects could have significant adverse environmental impacts. An environmental impact assessment (EIA) is required to address significant impacts.
- (ii) Category B. Projects could have some adverse environmental impacts, but of lesser degree or significance than those in Category A. An IEE is required to determine whether significant environmental impacts warranting an EIA are likely. If an EIA is not needed, the IEE is regarded as the final environmental assessment report.
- (iii) Category C. Projects are unlikely to have adverse environmental impacts. No EIA or IEE is required, although environmental implications are reviewed.

- (iv) Category FI. Projects involve a credit line through a financial intermediary or an equity investment in a financial intermediary. The financial intermediary must apply an environmental management system, unless all projects will result in insignificant impacts.

Environmental Management Plan (EMP). Identification of potential impacts and risks along with the mitigating measures through environmental assessment must be carried out. The level of detail and complexity of the EMP and the priority of the identified measures and actions will be commensurate with the project's impact and risks.

Public disclosure. In order for the affected people, other stakeholders, and the general public to provide inputs to further improve the project's design and implementation, the ADB shall post in their website the following documents:

- (i) for Environmental Category A projects, a draft EIA report at least 120 days before Board consideration;
- (ii) final or updated EIA and/or IEE upon receipt; and (iii) environmental monitoring reports submitted by the project management unit (PMU) during project implementation upon receipt.

International Guidelines. The International Finance Corporation (IFC) established an Environmental, Health, and Safety (EHS) Guidelines with general and industry-specific examples of Good International Industry Practice (GIIP). In line with this, all ADB-funded projects must adopt the IFC-EHS Noise Guidelines.

Under the noise management section are noise prevention and mitigation measures, noise level guidelines, and noise monitoring. MKWD must closely observe the IFC-EHS Noise Guidelines during the construction phase.

National Laws. The policy, legal, and administrative frameworks relevant to the environmental assessment of water supply and sanitation projects in the Philippines have long been established by the following laws and regulations:

- (i) Presidential Decree (PD) 198 – Provincial Water Utilities Act of 1973;
- (ii) PD 1586 – Philippine Environmental Impact Statement System;
- (iii) RA 9237 – Mount Apo Protected Area Act of 2003;
- (iv) RA 11038 – Expanded National Integrated Protected Areas System (ENIPAS) Act;
- (v) R.A. No. 8371 – Indigenous People's Rights (IPR) Act
- (vi) Department of Health (DOH) Administrative Order 2017-010 – Philippine National Standards for Drinking Water (PNSDW) of 2017;
- (vii) PD 1067 – Water Code of the Philippines;
- (viii) PD 856 - Code on Sanitation of the Philippines;
- (ix) Republic Act (RA) 9275 – Philippine Clean Water Act of 2004;

- (x) Department of Environment and Natural Resources (DENR) Administrative Order 2016-08 – Water Quality Guidelines and General Effluent Standards of 2016;
- (xi) PD 705 – Forestry Reform Code of the Philippines; and
- (xii) RA 11058 – Occupational Safety and Health Standards

The overall institutional framework is found in PD 198 PD 198 (Provincial Water Utilities Act of 1973). PD 198 indicates that the LWUA and WD setup as defined by LWUA, is mandated to promote the development of WDs in the country as a government corporation. It is mandated to “primarily be a specialized lending institution for the promotion, development, and financing of local water utilities.” In order to carry out the said mandate, the LWUA has major subsidiary roles such as:

- (i) prescribing minimum standards and regulations in order to assure acceptable standards of construction materials and supplies, maintenance, operation, personnel training, accounting, and fiscal practices for local water utilities; and
- (ii) providing technical assistance and personnel training programs.

The formation of local WDs is also mandated in the PD 198. These WDs were initially mandated to serve a single LGU or a cluster of LGUs by resolutions of the Local LGUs. These WDs, once formed becomes a legally autonomous body of the LGU. A board of directors, consisting of five (5) members representing different sectors that are appointed by either the mayor or the governor shall control the WD. The board of directors shall appoint the WD’s general manager.

LWUA is the executing agency under the project, while WDs, like PWD, are the executing agencies for their respective subprojects. LWUA is responsible for the overall coordination, implementation and liaison of the project with ADB and other government offices.

PD 1586 (Philippine Environmental Impact Statement System (PEISS)) and its implementing rules and regulation under the DENR Administrative Order No. 30 of 2003 (DAO 2003-30) cover the environmental assessment provision. The PEISS allows the project manager to receive an Environmental Compliance Certificate (ECC) from the Environmental Management Bureau (EMB) prior to the introduction of an infrastructure or development project. Under ADB’s Special Assessment Report on Environmental Safeguards (2006), the Philippine environmental assessment program complies with the environmental assessment criteria of ADB.

RA 9237 otherwise known as Mt. Apo Protected Area Act of 2003 established the Mount Apo Natural Park (MANP). The protected area under the jurisdiction of MANP is stretched in the areas of Davao City; Municipalities of Bansalan and Sta. Cruz, and Digos City in the Province of Davao Del Sur; Municipalities of Magpet and Makilala, and Kidapawan City in the Province of North Cotabato. Furthermore, designated buffer zones are within the same cities and municipalities except for Davao City.

According to Section 12 of the RA 11038 or the Expanded NIPAS Act, a clearance from Protected Area Management Board (PAMB) shall be acquired before issuing an ECC to a project proponent.

Through R.A. No. 8371 or the Indigenous People’s Rights Act (IPRA), the National Commission on Indigenous Peoples (NCIP) was established. The commission is responsible for safeguarding the rights of the indigenous peoples of the Philippines. The rights of

ownership and possession of Indigenous Cultural Communities/ Indigenous People to their ancestral domains shall be recognized and protected.

To ensure that the quality of the water supplies are kept on a level that is suitable for human consumption, DOH Administrative Order 2017-010 (DAO 2017-010) or the Philippine National Standards for Drinking Water (PNSDW) of 2017 which prescribes the standard quality for drinking waters was issued as guide for government and private developers and operators, bulk water suppliers, water refilling station operators and other drinking-water providers. The established threshold of each water quality parameter in the PNSDW of 2017 will ensure the safety of drinking water and protect the public health.

Appropriation and utilization of waters for various purposes shall be governed by PD 1067 or the Water Code of the Philippines and its amended Implementing Rules and Regulations (IRR). The National Water Resources Board (NWRB) shall administer and enforce the provisions thereof.

Pursuant to RA 9275 or the Philippine Clean Water Act of 2004, DENR Administrative Order No. 08 series of 2016 or the Water Quality Guidelines and General Effluent Standards of 2016, defines the standards for the discharge of all industrial and municipal wastewater while PD 856 (Philippine Sewage Code) also includes sewage and septic tanks. To ensure the compliance of the facility with the specified effluent requirements, the project applicant must obtain a discharge permit from the EMB-RO.

During site preparation, when trees (timber or other forest products) are to be removed, a tree cutting permit shall be obtained as stipulated in PD 705 or the Forestry Reform Code of the Philippines.

To ensure a safe and healthful workplace for all the workforce and protection against all hazards in their work environment, adherence to Department of Labor and Employment (DOLE) Occupational Safety and Health Hazard Standards must be followed, with emphasis on the following:

- (i) Personal Protective Equipment (PPE-Rule 1040) which specify the use and types of eye and face protection, respiratory protection, hand and arm protection, safety belt life lines and safety nets and safety shoes;
- (ii) Personal Protective Equipment, and minimum space requirement for gas, electric welding and cutting operations (Rule 1100);
- (iii) Fire protection and control rule (Rule 1940);
- (iv) Notification and record keeping requirements (Rule 1050);
- (v) Mandatory provisions of a safety program for local Contactors in line with overall safety program of the Proponent; and
- (vi) Effective preparedness program against accidents and untoward incidents through ready medical assistance as well as early detection, warning and response measures.

Table 2-1 presents the summary of environmental regulations and mandatory requirements for the proposed subproject.

Table 2-1: Summary of Environmental Regulations and Mandatory Requirements for the Proposed Subproject

LAWS, RULES AND REGULATIONS	DESCRIPTION/SALIENT FEATURES	PERMIT/CLEARANCE	REQUIRED FOR THE PROJECT
PD 1586 and its implementing rules and regulations	Requires project proponents to secure ECC from the DENR before an infrastructure project is constructed. DAO 03-30 provides the implementing rules and regulations for PD 1586 and the Revised Procedural Manual of DAO 03-30 integrates DENR policies to promote EIA as a planning and decision-making tool. DENR MC No. 2011-005 further streamlined the PEISS.	ECC for proposed projects under the EIS system or Certificate of Non-Coverage (CNC) for proposed projects not covered by the system.	An online ECC application is required for water supply projects with water source, treatment facilities, and Level III distribution system in order to secure an ECC. An IEE Checklist Report may be required which is under the discretion of the EMB-RO.
Water Code of the Philippines (PD 1067) and its amended implementing rules and regulations	Establishes the principles for appropriation, control and conservation of water resources in the country and defines the rights and obligations of water users.	Water Permit and Permit to Drill from NWRB	Application for permit to drill shall be filed to the NWRB prior to drilling and then water permit after completion of the drilling.
RA 7160 or Local Government Code of 1991 DAR Administrative Order No. 01, Series of 2002 or the Comprehensive Rules on Land Use Conversion	Provides the rules for reclassification of agricultural lands at the local level in terms of authority, grounds for reclassification and limitations. Provides for effective means of evaluating applications for land use conversion by the DAR regional and central offices.	Land Use Conversion Permit from DAR – Regional Office	Application for Land Use Conversion for Barangay Bulacanon, Makilala will be processed after test drill and if the production and quality test drill result is favorable and/or feasible.
RA 11038 and RA 9237	Declares the protected area and provides for their management. Both designated the Protected Area Management Board (PAMB) as the highest policy-making body	PAMB Clearance	To be secured prior to issuing of ECC
R.A. No. 8371 or the IPR Act	Established NCIP who shall be responsible for safeguarding the rights of the indigenous peoples of the Philippines.	Memorandum of Agreement	To be secured prior to issuing of ECC
IFC-EHS Noise Guidelines	Provides measures on noise prevention and mitigation measures, noise level guidelines, and noise monitoring.	None	To be implemented during construction period.
(DOLE Occupational Safety and Health Hazard Standards	Ensures a safe and healthful workplace for all the workforce and protection against all hazards in their work environment	None	To be implemented during construction and operation period.
DAO 2017-010 or the PNSDW of 2017	Prescribes the standard quality for drinking waters as guide for government and private developers and operators, bulk water suppliers, water refilling	None	Periodic reports shall be submitted to DOH during the operation period.

Laws, Rules and Regulations	Description/Salient Features	Permit/Clearance	Required for the Project
	station operators and other drinking-water providers. The established threshold of each water quality parameter in the PNSDW of 2017 will ensure the safety of drinking water and protect the public health.		

Local Laws. The legal administrative framework relevant to creating the MKWD is the Sangguniang Panlalawigan of North Cotabato Resolution No. 112 series of 1976.

3 DESCRIPTION OF THE PROJECT

A. Existing Situation of Metro Kidapawan Water District's Water Supply and Resources

There are two (2) types of water resources that are being utilized by the MKWD, surface water and spring. **Table 3-1** summarizes the existing water supply system of MKWD.

Table 3-1: Existing Water Supply System

Type of Source	Source	Location	Production (Lps)
A. Surface Water	Lapaan (Saguing River)	Brgy. Perez, Kidapawan City	235.27
B. Spring	Ilian	Brgy. Buhay, Makilala	91.00
	Puwagan	Brgy. Batasan Makilala	51.48
	Pinang- Inaman	Brgy. Perez, Kidapawan City	29.00
	Lumot	Brgy. Perez, Kidapawan City	20.26
	Inanapo	Brgy. Ilomavis, Kidapawan City	13.00
	Bongolanon	Brgy. Bongolanon, Magpet	73.00

As of December 31, 2019, MKWD has a total of 797,612 lineal meters (lm) of transmission and distribution pipeline ranging from 50 millimeters (mm) to 300 mm. MKWD has one (1) combined rapid and slow sand filtration facility located at Brgy. Perez Kidapawan City. MKWD also has ten (10) water impounding structures with capacities ranging from 300 cubic meter (m³) to 1,500 m³.

MKWD has twelve water impounding facilities, four (4) of which has booster pumps all equipped with generator sets for continuous pumping operations during power and power failure. Water is treated using gas fed and hypo-chlorinators.

Table 3-2 summarizes the information about the present water impounding and pumping stations of MKWD. **Figure 3-1** and **Figure 3-2** shows the service area coverage and distribution system schematic diagram of MKWD while **Table 3-3** presents the summary of existing pipeline network of MKWD.

Table 3-2: Summary of Pumping Stations and Reservoirs in MKWD

Pump Station and Reservoirs / Location	Pump Type	Motor Rating (Hp)	Reservoir Capacity (m ³)
1. Amas, Kidapawan City PS	Booster	100	600
2. Mua-an, Kidapawan City PS	Booster	100	500
3. Manongol, Kidapawan City Res. 1	None	N/A	912
4. Manongol, Kidapawan City Res. 2	None	N/A	1,495
5. Magsaysay, Kidapawan City PS	None	N/A	300
6. Perez, Kidapawan City PS	None	N/A	1,300
7. Poblacion, Kidapawan City PS	Booster	60	600
8. Poblacion, Matalam Res. 1	None	N/A	45
9. Poblacion, Matalam Res. 2	None	N/A	150
10. Saguing, Makilala Res. 1	None	N/A	300
11. Saguing, Makilala Res. 2	Booster	100	920
12. Poblacion, Makilala PS	None	N/A	600

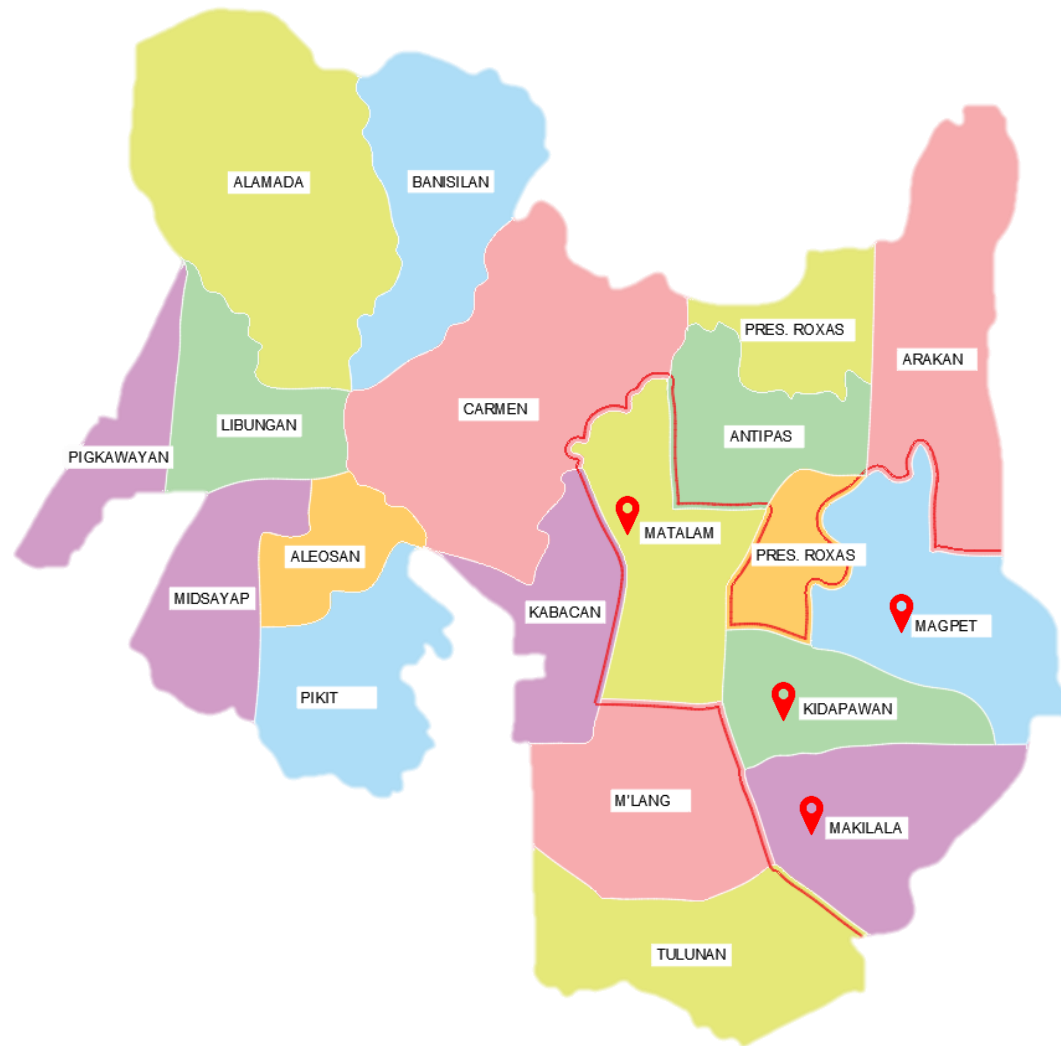
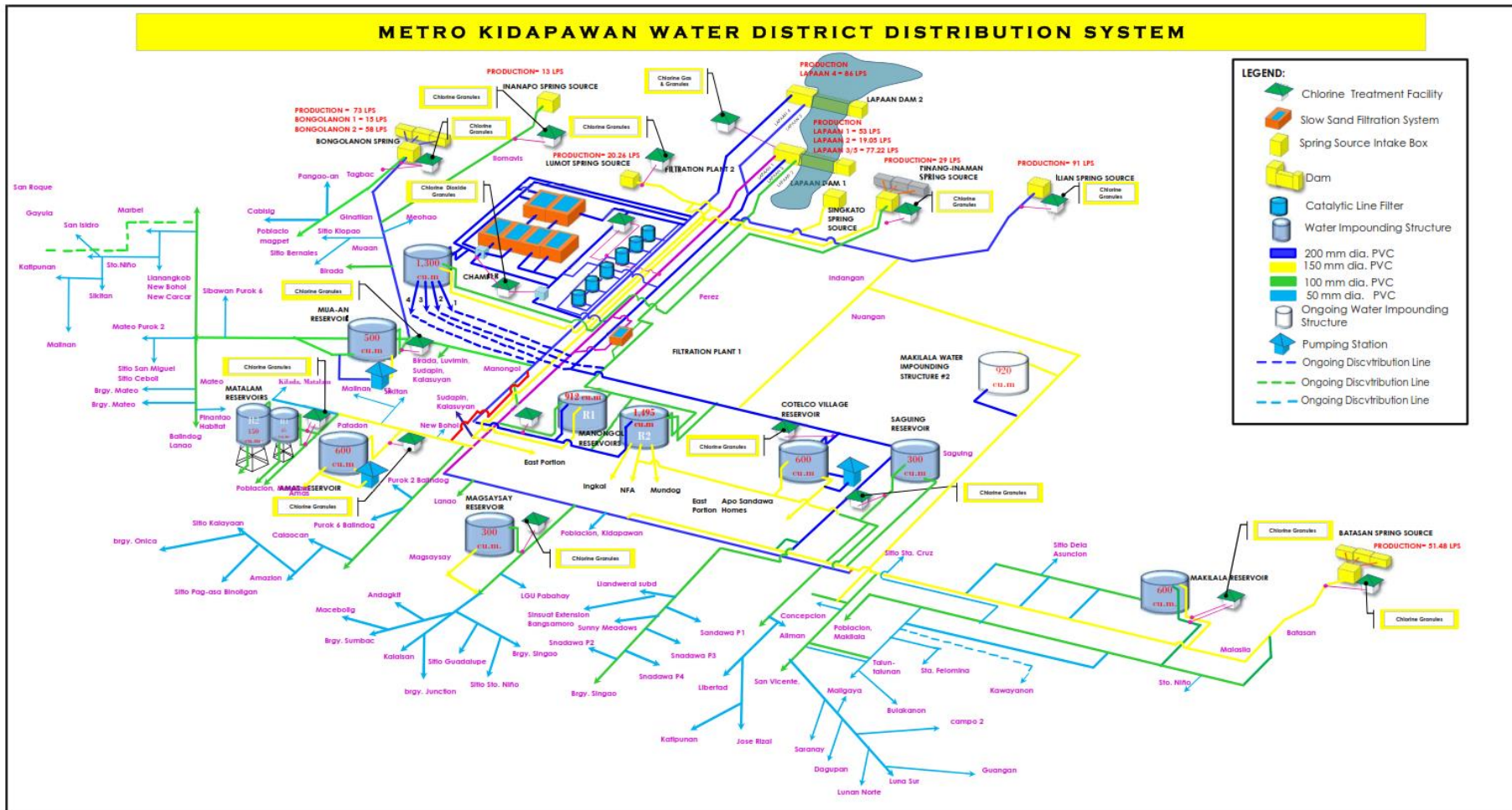


Figure 3-1: Service Coverage Area of MKWD



Source: Metro Kidapawan Water District (December, 2019)

Figure 3-2: Schematic Diagram of MKWD Current Distribution System

Table 3-3: Summary of Existing Transmission and Distribution Pipeline Network

Metro Kidapawan Water District Pipeline Inventory As of December 2019		
Diameter (mm)	Material	Length
50	uPVC	291,812
50	PE	22,012
50	GI	14,346
63	GI	252
63	uPVC	7,875
75	ACP	225
75	uPVC	39,151
75	GI	6,056
100	GI	1,705
100	uPVC	192,987
100	CCI	10,600
150	GI	8,611
150	CCI	12,870
150	uPVC	110,179
200	uPVC	70,191
200	GI	84
200	CCI	3,492
250	CCI	2,866
300	CCI	2,298

B. Water Availability

The proposed development of Notongon Spring Source is located in Brgy. Buhay, Makilala, North Cotabato which was first assessed in 2018. Series of evaluation was conducted in 2019 to monitor the changes in its production throughout the year. Based on evaluation, there is a need to install distribution and transmission pipelines to augment water from the source to the target barangays.

The land where the facilities are to be constructed is within or covered by the Certificate of Ancestral Domain (CADT). Series of consultations and Free, Prior, and Informed Consent (FPIC) meetings were conducted for the proposed source development project.

Currently, the production of water resources being utilized by MKWD does not meet the required demand of the population within its service area. With this, MKWD is considering development of other surface water sources within Kidapawan City, Makilala, Magpet, and Matalam to address the long-term water sustainability requirements of its area.

C. Operation and Maintenance

The operation and maintenance of the existing water supply system is handled by the MKWD's Water Resources and Production Department, and Maintenance Department. The operation and maintenance expenses is comprised of pumping expenses, water treatment, annual dues to be paid to other agencies (e.g., National Water Regulatory Board), customers' account, and administration and general expenses.

D. Fire Hydrants and Gate Valves

MKWD has 81 units of fire hydrants with in the area of their coverage. Of which, 69 is in Kidapawan City, five (5) in Makilala, four (4) in Magpet and three (3) in Matalam. Most of these hydrants are located in more populated areas such as public markets, subdivisions, and residential areas.

There are also 300 units flushing points ranging from 50 mm to 200 mm installed within the MKWD pipe network for system cleaning and maintenance purposes.

E. Water Use

The water usage is classified as Residential/Government, Commercial/Industrial, Semi-Commercial A, Semi-Commercial B, Semi-Commercial C and Bulk/Wholesale. The residential consumers are persons and establishments whose connections are intended for their own personal use and other related activities while government establishments' water use are for their operation in performing public service. Meanwhile, commercial usage of water is intended for business, trade activities, occupation, or to produce a commercial or saleable product. This is further classified into Commercial A, B, or C. Finally, bulk/wholesale are connections that are intended and connected to the system for the purpose of reselling the same without transforming into a new product.

The reported total service connection of MKWD for December 2019 is approximately 35,000.

F. Service Coverage

MKWD operates a water supply system which serves one (1) city and three (3) municipalities namely Kidapawan City, Municipalities of Makilala, Magpet, and Matalam North Cotabato.

As of December 31, 2019, MKWD serves only 46.53% of its service area coverage. Among the barangays that are not served by MKWD are Barangay Buhay, Garsika, New Cebu and Buena Vida.

Table 3-4: MKWD Area Coverage as of January 2020

Area	Total Barangay	Barangay Served	% Served	Remarks
Kidapawan	40	38	95	Potential barangays to serve: 2 (5%)
Makilala	38	19	50	Beyond reach of System: 11 barangays
Magpet	32	5	15.6	Potential barangay to serve: 4 (12.5%) Beyond reach of System: 23 barangays
Matalam	34	5	14.7	Potential Barangay to serve: 2 (12.5%) Beyond reach of System: 27 barangays

G. Service Connections

As of December 2019, there is approximately 35,000 service connections tapped at MKWD water system.

The projected population served and average water demand projections of MKWD is shown in **Table 3-5**.

Table 3-5: Projected Service Connections and Water Demand

Barangay	Projected Served Population			Average Water Demand (m ³ /day)		
	2020	2025	2030	2020	2025	2030
Kidapawan City						
Amas	1,168	1343	1,545	289	332	382
Amazion	107	123	142	26	30	35
Balindog	1,156	1329	1,529	286	329	378
Binoligan	594	683	786	147	169	194
Birada	121	139	160	30	34	40
East patadon	154	177	204	38	44	50
Ginatilan	143	164	189	35	41	47
Junction	40	46	53	10	11	13
Kalasuyan	856	984	1,132	212	244	280
Kalaisan	649	746	858	161	185	212
Katipunan	133	153	176	33	38	44
lilomavis	14	16	19	3	4	5
Indangan	16	18	21	4	5	5
Lanao	2,358	2712	3,118	584	671	772
Linangkob	253	291	335	63	72	83
Luvimin	189	217	250	47	54	62
Macebolig	14	16	19	3	4	5
Magsaysay	1,156	1329	1,529	286	329	378
Malinan	60	69	79	15	17	20
Manongol	905	1041	1,197	224	258	296
Marbel	254	292	336	63	72	83
Mateo	554	637	733	137	158	181
Meohao	15	17	1545	4	4	5
Mua-an	219	252	142	54	62	72
New Bohol	360	414	1,529	89	102	118
Nuangan	274	315	786	68	78	90
Onica	91	105	160	23	26	30
Paco	1,085	1248	204	269	309	355
Perez	263	302	189	65	75	86
Poblacion	10,160	11684	53	2,515	2,892	3,326
San Isidro	105	121	1,132	26	30	34
Sibawan	210	242	858	52	60	69
Singao	1,961	2255	176	485	558	642
Sikitan	181	208	19	45	52	59
Sto. Niño	141	162	21	35	40	46
Sudapin	2,235	2570	3,118	553	636	732
Sumbac	112	129	335	28	32	37
Subtotal	28,306	32,552	37,435	7,006	8,057	9,265
Municipality of Makilala						
Batasan	73	84	97	18	21	24
Bulkanon	298	343	394	74	85	98
Concepcion	332	382	439	82	94	109

Barangay	Projected Served Population			Average Water Demand (m ³ /day)		
	2020	2025	2030	2020	2025	2030
Dagupan	69	79	91	17	20	23
Guangan	59	68	78	15	17	19
Katipunan	18	21	24	4	5	6
Kawayanon	6	7	8	1	2	2
Libertad	248	285	328	61	71	81
Luna Norte	163	187	216	40	46	53
Luna Sur	120	138	159	30	34	39
Patulangun/Malasila	763	877	1,009	189	217	250
New Cebu	4	5	5	1	1	1
Poblacion	2,254	2,592	2,981	558	642	738
Saguing	1,480	1,702	1,957	366	421	484
San Vicente	451	519	596	112	128	148
Jose Rizal	155	178	205	38	44	51
Sto. Niño	12	14	16	3	3	4
Sta. Felomina	148	170	196	37	42	48
Taluntalunan	282	324	373	70	105	92
Subtotal	6,935	7,975	9,172	1,716	1,999	2,270
Municipality of Magpet						
Bongolanon	6	7	7	1	2	2
Gubatan	149	171	174	37	42	43
Kisandal	24	28	28	6	7	7
Poblacion	510	587	595	126	145	147
Tagbak	34	39	40	8	10	10
Subtotal	723	831	844	179	206	209
Municipality of Matalam						
Kidama	95	109	126	24	27	31
Kilada	94	108	124	23	27	31
Manubuan	221	254	292	55	63	72
Poblacion	943	1,084	1,247	233	268	309
West Patadon	80	92	106	20	23	26
Subtotal	1,433	1,648	1,895	355	408	469

Table 3-6 presents the prevailing water rates within the service area per type of water connections /user.

Table 3-6: Prevailing Water Rates, 2019

Classification	Size of Pipe	Current Rate					
		0-10 (Minimum Charge)	11-20 m ³	21-30 m ³	31-40 m ³	41-50 m ³	50 & Above
Kidapawan, Makilala, and Magpet							
Residential / Government	1/2"	156.60	17.95	20.30	22.65	25.00	27.35
	3/4"	250.85	17.95	20.30	22.65	25.00	27.35
	1"	501.70	17.95	20.30	22.65	25.00	27.35
	1 1/2"	1,254.40	17.95	20.30	22.65	25.00	27.35
	2"	3,136.00	17.95	20.30	22.65	25.00	27.35
Commercial / Industrial	1/2"	313.20	35.90	40.60	45.30	50.00	54.70
	3/4"	501.70	35.90	40.60	45.30	50.00	54.70
	1"	1,003.40	35.90	40.60	45.30	50.00	54.70
	1 1/2"	2,508.80	35.90	40.60	45.30	50.00	54.70

Classification	Size of Pipe	Current Rate					
		0-10 (Minimum Charge)	11-20 m ³	21-30 m ³	31-40 m ³	41-50 m ³	50 & Above
	2"	6,272.00	35.90	40.60	45.30	50.00	54.70
Semi-Commercial A	1/2"	274.05	31.40	35.50	39.60	43.75	47.85
	3/4"	438.95	31.40	35.50	39.60	43.75	47.85
	1"	877.90	31.40	35.50	39.60	43.75	47.85
	1 1/2"	2,195.20	31.40	35.50	39.60	43.75	47.85
	2"	5,488.00	31.40	35.50	39.60	43.75	47.85
Semi-Commercial B	1/2"	234.90	26.90	30.45	33.95	37.50	41.00
	3/4"	376.25	26.90	30.45	33.95	37.50	41.00
	1"	752.50	26.90	30.45	33.95	37.50	41.00
	1 1/2"	1,881.60	26.90	30.45	33.95	37.50	41.00
	2"	4,704.00	26.90	30.45	33.95	37.50	41.00
Semi-Commercial C	1/2"	195.75	22.40	25.35	28.30	31.25	34.15
	3/4"	313.55	22.40	25.35	28.30	31.25	34.15
	1"	627.10	22.40	25.35	28.30	31.25	34.15
	1 1/2"	1,568.00	22.40	25.35	28.30	31.25	34.15
	2"	3,920.00	22.40	25.35	28.30	31.25	34.15
Bulk / Wholesale	1/2"	470.40	53.85	60.90	67.95	75.00	82.05
	3/4"	752.55	53.85	60.90	67.95	75.00	82.05
	1"	1,505.10	53.85	60.90	67.95	75.00	82.05
	1 1/2"	3,763.10	53.85	60.90	67.95	75.00	82.05
Matalam							
Residential / Government	1/2"	156.25	17.20	20.30	23.45	26.65	29.85
	3/4"	250.00	17.20	20.30	23.45	26.65	29.85
	1"	500.00	17.20	20.30	23.45	26.65	29.85
	1 1/2"	1,250.00	17.20	20.30	23.45	26.65	29.85
	2"	3,125.00	17.20	20.30	23.45	26.65	29.85
Commercial / Industrial	1/2"	312.50	34.40	40.60	46.90	53.30	59.70
	3/4"	500.00	34.40	40.60	46.90	53.30	59.70
	1"	1,000.00	34.40	40.60	46.90	53.30	59.70
	1 1/2"	2,500.00	34.40	40.60	46.90	53.30	59.70
	2"	6,250.00	34.40	40.60	46.90	53.30	59.70
Semi-Commercial A	1/2"	273.40	30.10	35.50	41.00	46.60	52.20
	3/4"	437.50	30.10	35.50	41.00	46.60	52.20
	1"	875.00	30.10	35.50	41.00	46.60	52.20
	1 1/2"	2,187.50	30.10	35.50	41.00	46.60	52.20
	2"	5,468.75	30.10	35.50	41.00	46.60	52.20
Semi-Commercial B	1/2"	234.35	25.80	30.45	35.15	39.95	44.75
	3/4"	375.00	25.80	30.45	35.15	39.95	44.75
	1"	750.00	25.80	30.45	35.15	39.95	44.75
	1 1/2"	1,875.00	25.80	30.45	35.15	39.95	44.75
	2"	4,687.50	25.80	30.45	35.15	39.95	44.75
Semi-Commercial C	1/2"	195.30	21.50	25.35	29.30	33.30	37.30
	3/4"	312.50	21.50	25.35	29.30	33.30	37.30

Classification	Size of Pipe	Current Rate					
		0-10 (Minimum Charge)	11-20 m ³	21-30 m ³	31-40 m ³	41-50 m ³	50 & Above
	1"	625.00	21.50	25.35	29.30	33.30	37.30
	1 1/2"	1,562.50	21.50	25.35	29.30	33.30	37.30
	2"	3,906.25	21.50	25.35	29.30	33.30	37.30
Bulk / Wholesale	1/2"	468.75	51.60	60.90	70.35	79.95	89.55
	3/4"	750.00	51.60	60.90	70.35	79.95	89.55
	1"	1,500.00	51.60	60.90	70.35	79.95	89.55
	1 1/2"	3,750.00	51.60	60.90	70.35	79.95	89.55

H. Water Consumption and Total Water Production

The average total monthly water consumption for residential and commercial connections as of February 2020 is 507,616.2 m³ and 110,594.86 m³ per month, respectively with a total of 618,211.06 m³.

Meanwhile the total water production of MKWD is based on the water discharged from the water sources on a certain period. This is measured by the production/flow meter reading in MKWD source facilities. The current daily average production of the MKWD is around 44,324.06 m³ or about 1,329,721 m³ monthly.

The total monthly water consumption only accounts for 46.5% of the total monthly water production while 19% normally comes from non-revenue water, thus, having a discrepancy of 34.5% unaccounted water loss. This is brought by the water production that is not of normal condition. Currently, the total water production is reduced by 27% due to the dry spell and the damages of the recent earthquake, thus, drastically reducing the total water consumption of the concessionaires and increasing NRW for the month of February 2020.

I. Non-revenue Water

Normally, non-revenue water (NRW) of MKWD is estimated to range from 16% to 19% of the total water production. NRW is comprised of unaccounted water losses due to pipeline leaks which are undetected, water losses due to maintenance activities, and commercial losses due to the defective water meter.

Currently, MKWD is conducting general water metering program wherein the water meters that have been used for five (5) years and above are being replaced by new water meters. This is to minimize the unaccounted commercial water losses. MKWD is also conducting regular calibration of water meters to address this problem.

J. Description of the Proposed Subproject

Location. The proposed site for the Notongon Source development is located in Brgy. Buhay, Makilala and is under the ancestral domain of the Manobo tribe. It is approximately 1.20 kilometers (km) away from the settlement area of the barangay and has an approximate coordinates of N 6°59.113' E 125°11.343'.

Matiboggo source is located in Brgy. Buena Vida and is also under the same ancestral domain. It is 3 kilometers from the barangay community and has an approximate coordinates of N 6°58'11" E 125°10'46".

Meanwhile, the three (3) proposed groundwater facilities are located in Brgy. Manubuan, Matalam, Brgy. Kalaisan, Kidapawan City, and Brgy. Bulacanon, Makilala.

Source Development. This item includes development of Notongon Spring source and Matiboggo Spring source, construction of intake box at Ilian Spring, and construction of three (3) groundwater source facilities.

Development of Notongon Spring source includes construction of concrete intake chamber and impounding chamber with a capacity of 200 cubic meters.

Development of Matiboggo Spring source includes construction of river water intake structure and treatment facilities. MKWD will construct concrete water catchment structure along Matiboggo River located at Sitio Apoy-Apoy, Brgy. Buena Vida, Makilala with a height of 1.80 m referred to a riverbed elevation of 785 m. It will cover a reservoir surface of 60 square meters with gross volume of 108 cubic meters at full capacity. It will also entail the construction of the following:

- 10 meters long concrete dike on each side of the structure; and
- One (1) concrete tower on left side which will serve as impounding structure and treatment chamber.

Maximum required flow is 6 MLD or 70 lps.

Approximately 90 liters per second (lps) will be added to MKWD system upon completion of this.

The proposed (3) groundwater source facilities are expected to yield 60 lps each. These projects also include construction of treatment facility, pump house, and utility shed.

Pumping Facilities. This item includes the electro-mechanical equipment needed to extract water from the proposed sources. This includes purchase of one (1) 100 HP and five (5) 60 HP vertical multistage centrifugal booster pumps to be installed in the proposed water impounding facilities to improve water supply and pressure distribution in the areas.

Back-up power generator sets are also installed to ensure continuous water supply even during power outages. Powerhouse extension and electrification, pump house construction, and site development are also included in this item.

Site planning in terms of fencing work, earth cut and fill, ground preparation is given in this item for the water impounding facilities and ground water source development projects.

Treatment Facilities. This item requires the provision of a chlorinating facility to ensure that the water provided to consumers is free of pathogenic disease-causing microorganisms. For each of the proposed source development, deep well/pumping stations and water impounding facilities projects, a chlorinator equipment utilizing gas chlorine as a disinfectant will be provided.

Storage and Other Facilities. This item includes construction of ground modular steel tanks and elevated steel tanks.

Pipelines and Appurtenances. A total of 142,707 lineal meters (lm) of transmission and distribution lines will be laid to enhance and broaden the coverage of the service area, including the barangays currently served and the planned additional barangays. The pipes to

be laid are composed of uPVC and/or steel pipes ranging from 50 mm to 250 mm in size. Provisions for pipe fittings, valves and blow-off fittings are also included in this item.

Lot Acquisition. The project includes acquisition of eight (8) lots for water impounding facilities, groundwater source facilities and treatment facilities.

The location of the Notongon Spring Source Development Subproject and Matiboggo Spring Source Development Project is covered by Certificate of Ancestral Domain Title (CADT) does not require acquisition of lot. A Memorandum of Agreement (MOA) between MKWD and the CADT owners was formulated and is currently for review and approval of National Commission on Indigenous Peoples (NCIP).

Solar Power Facilities. This item includes installation of nine (9) solar power facilities and lightings which will be located within the area of the project components.

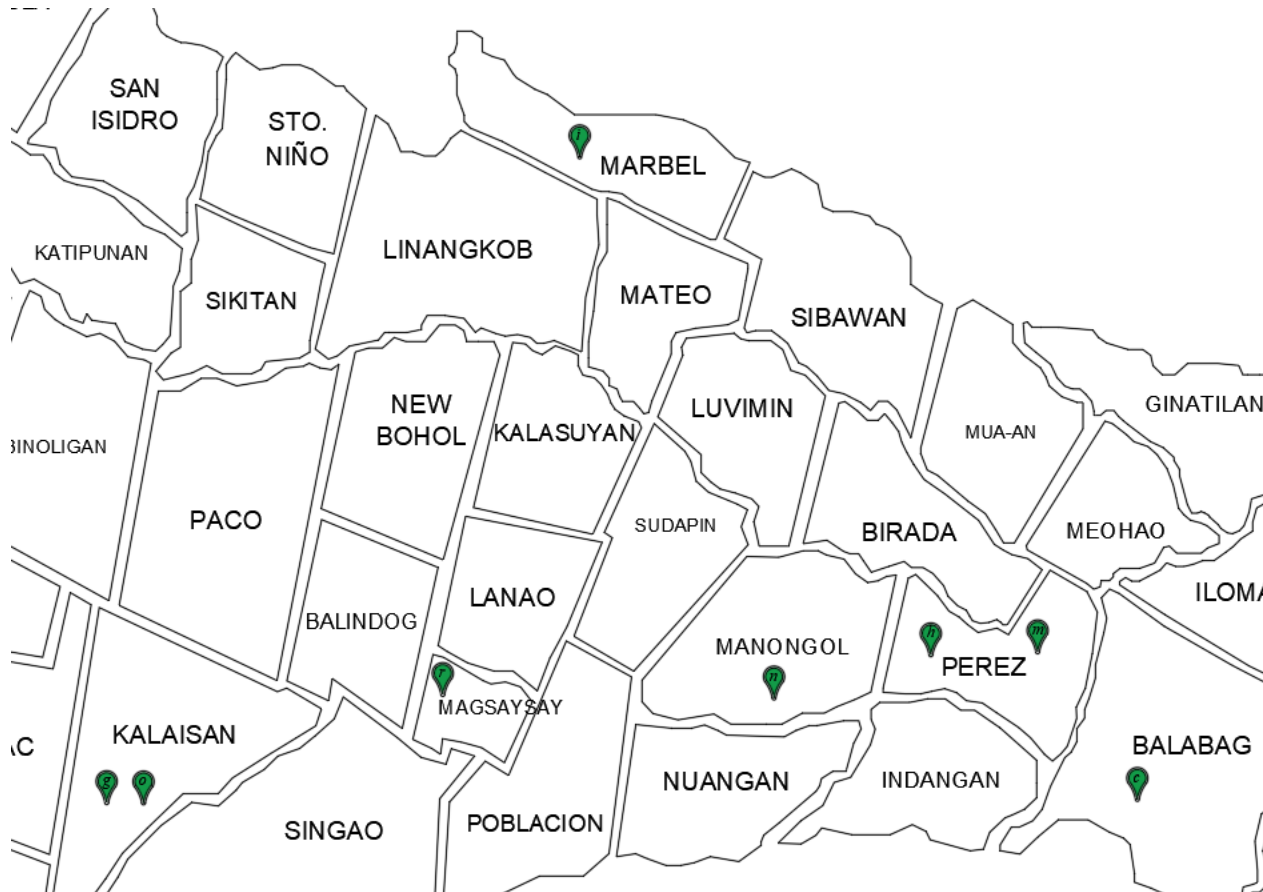
Construction of Different Facilities. This item covers the construction of water meter calibration facilities, monitoring stations and bunk house, guard house, comfort room, utility shed and storage rooms, water resources division office, and perimeter fence.

Price and Physical Contingencies. This item covers all possible cost changes and unexpected additional costs required for non-engineering work items. Allocation of risks and physical contingencies are 5% of the number of basic cost items of the non-engineering aspect. The project estimated cost of the project is presented in **Table 3-7**. Meanwhile, the location of the proposed projects of the project and the recommended improvement is presented in **Figure 3-3**.

Table 3-7: Project Estimate Cost (Php)

Particulars	WD Equity	LWUA Loan	Total
Engineering Basic Cost Items			
Source Development			
Pumping Facilities			
Treatment Facilities			
Storage Facilities & Other Facilities			
Pipelines & Appurtenances			
Sub-Total I			
Price and Physical Contingencies (PPC) (10% Of Sub-Total I)			
Engineering Charges (2% Of Sub-Total I + PPC)			
Project Monitoring (1% Of Sub-Total I + PPC)			
Non-Engineering Basic Cost Items			
Lot Acquisition			
Solar Power Facilities			
Water Meter Calibration Building			
Monitoring Stations & Bunk House			

Particulars	WD Equity	LWUA Loan	Total
Guard House			
Comfort House			
Utility Shed & Storage Rooms			
Water Resources Division Office			
Perimeter Fence			
Data Logger Computer System			
Freight & Handling			
Total II			
Total Project Cost (Total I + Total II)			



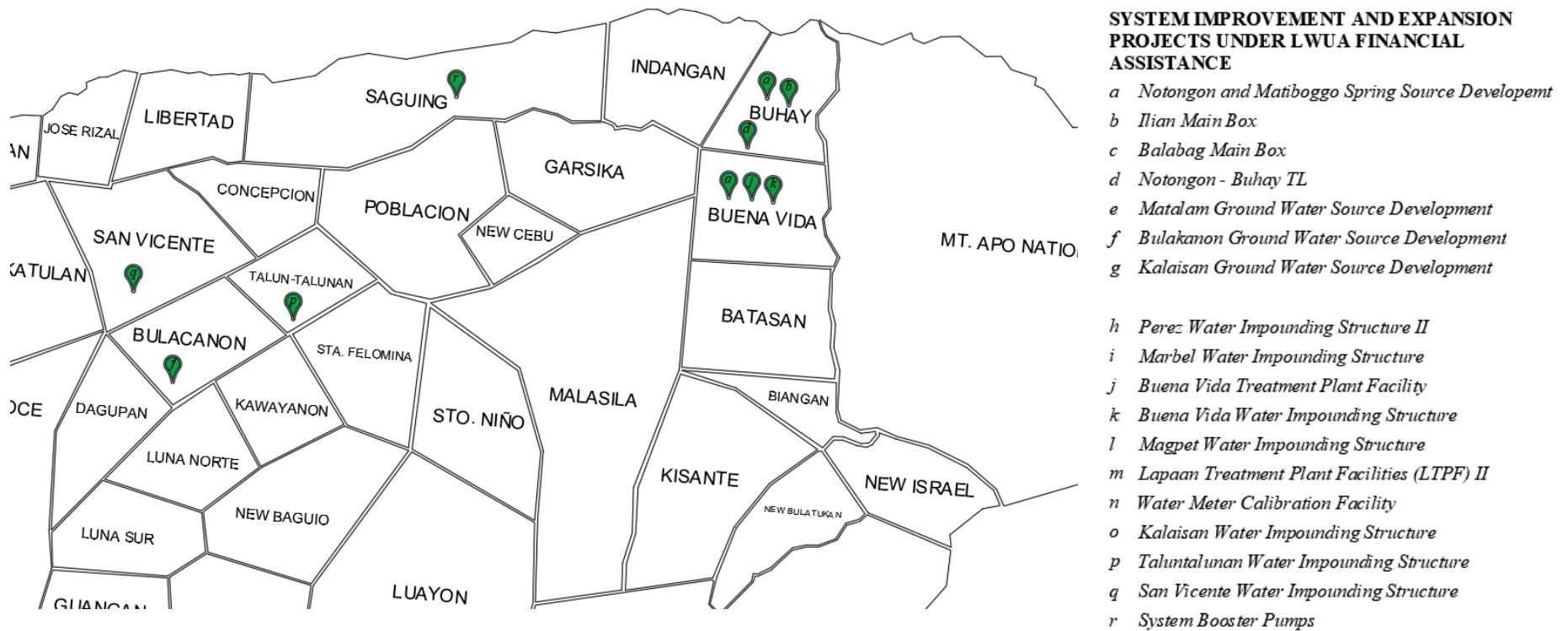
**SYSTEM IMPROVEMENT AND EXPANSION
 PROJECTS UNDER LWUA FINANCIAL
 ASSISTANCE**

- a Notongon and Matiboggo Spring Source Development
- b Ilian Main Box
- c Balabag Main Box
- d Notongon - Buhay TL
- e Matalam Ground Water Source Development
- f Bulakanon Ground Water Source Development
- g Kalaisan Ground Water Source Development

- h Perez Water Impounding Structure II
- i Marbel Water Impounding Structure
- j Buena Vida Treatment Plant Facility
- k Buena Vida Water Impounding Structure
- l Magpet Water Impounding Structure
- m Lapaan Treatment Plant Facilities (LTPF) II
- n Water Meter Calibration Facility
- o Kalaisan Water Impounding Structure
- p Taluntalunan Water Impounding Structure
- q San Vicente Water Impounding Structure
- r System Booster Pumps

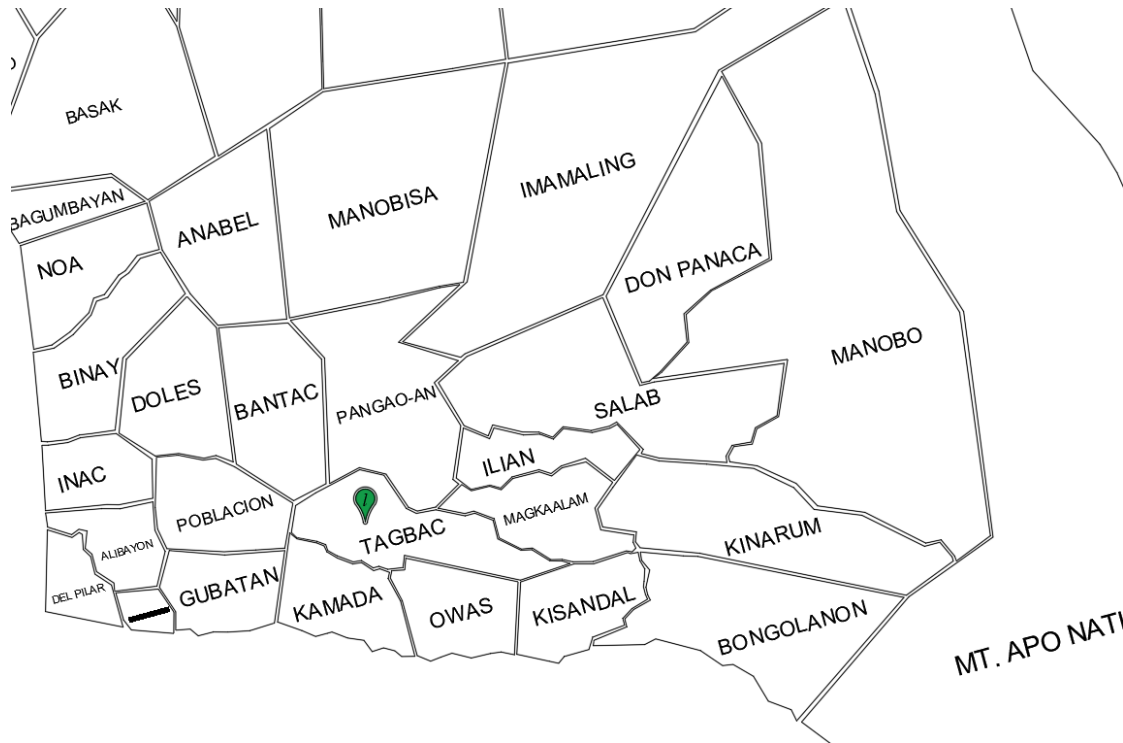
(a) Proposed Improvements in Kidapawan City, North Cotabato

Figure 3-3: Recommended Improvements for MKWD



(b) Proposed Improvements in Municipality of Makilala, North Cotabato

Figure 3-3: Recommended Improvements for MKWD



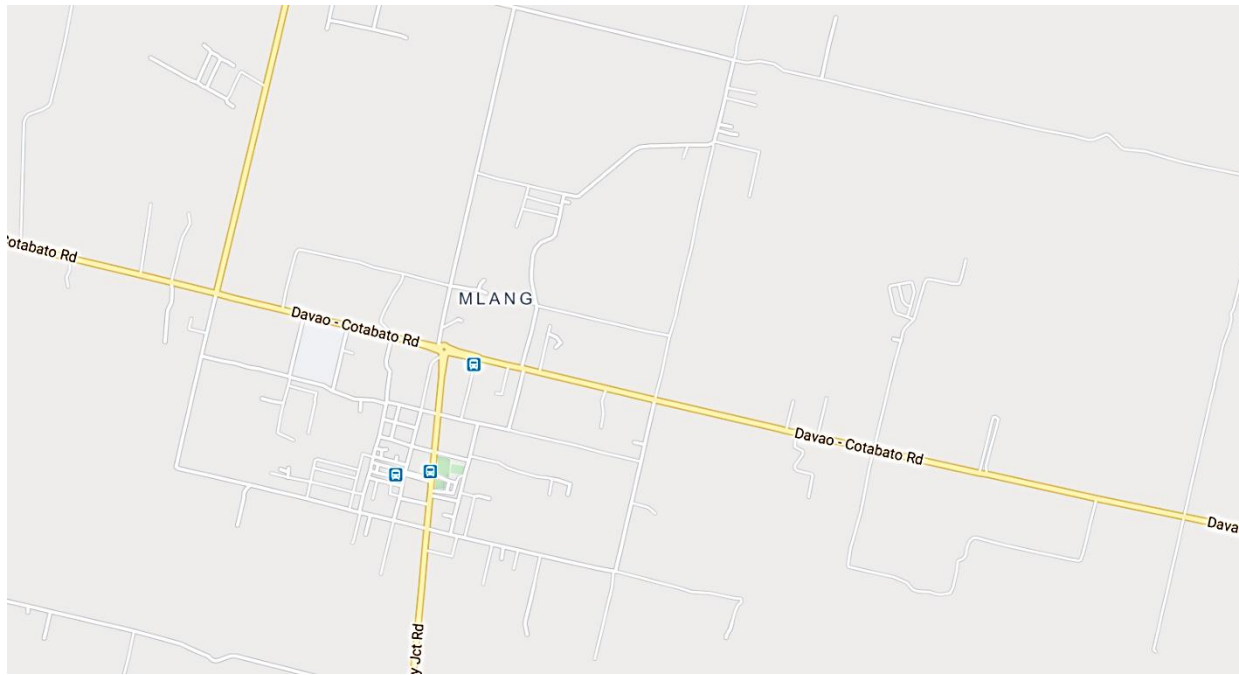
**SYSTEM IMPROVEMENT AND EXPANSION
 PROJECTS UNDER LWUA FINANCIAL
 ASSISTANCE**

- a Notongon and Matiboggo Spring Source Development
- b Ilian Main Box
- c Balabag Main Box
- d Notongon - Buhay TL
- e Matalam Ground Water Source Development
- f Bulakanon Ground Water Source Development
- g Kalaisan Ground Water Source Development

- h Perez Water Impounding Structure II
- i Marbel Water Impounding Structure
- j Buena Vida Treatment Plant Facility
- k Buena Vida Water Impounding Structure
- l Magpet Water Impounding Structure
- m Lapaan Treatment Plant Facilities (LTPF) II
- n Water Meter Calibration Facility
- o Kalaisan Water Impounding Structure
- p Taluntalunan Water Impounding Structure
- q San Vicente Water Impounding Structure
- r System Booster Pumps

(c) Proposed Improvements in Municipality of Magpet, North Cotabato

Figure 3-3: Recommended Improvements for MKWD



**SYSTEM IMPROVEMENT AND EXPANSION
 PROJECTS UNDER LWUA FINANCIAL
 ASSISTANCE**

- a Notongon and Matiboggo Spring Source Development
- b Ilian Main Box
- c Balabag Main Box
- d Notongon - Buhay TL
- e Matalam Ground Water Source Development
- f Bulakanon Ground Water Source Development
- g Kalaisan Ground Water Source Development

- h Perez Water Impounding Structure II
- i Marbel Water Impounding Structure
- j Buena Vida Treatment Plant Facility
- k Buena Vida Water Impounding Structure
- l Magpet Water Impounding Structure
- m Lapaan Treatment Plant Facilities (LTPF) II
- n Water Meter Calibration Facility
- o Kalaisan Water Impounding Structure
- p Taluntalunan Water Impounding Structure
- q San Vicente Water Impounding Structure
- r System Booster Pumps

(d) Proposed Improvements in Municipality of Matalam, North Cotabato

Figure 3-3: Recommended Improvements for MKWD

4 DESCRIPTION OF THE ENVIRONMENT

This section discusses the baseline conditions of the environment of the City of Kidapawan and Municipalities of Magpet, Makilala, and Matalam, where the proposed improvements for water supply subproject are located.

A. Physical Resources

Geographical Location. The City of Kidapawan is located at the southeastern portion of the province. It lies 7° north longitude and 125° latitude. It is located almost midway between the cities of Davao and Cotabato. It is bounded on the north by the municipalities of President Roxas and Magpet, on the south by Makilala, on the southwest by M'lang, and on the northwest by Matalam.

The Municipality of Magpet is located in the eastern part of Cotabato Province and at the foothills of Mt. Apo with generally a sloping to mountainous terrain. It lies 7° 6' north longitude and 125° 7' latitude.

The Municipality of Makilala is located on the south-east portion of Cotabato and the last town of the province going to Davao City. It is bounded by the City of Kidapawan in the north, Municipality of M'lang in the west, province of Davao del Sur in the east and Municipality of Tulunan in the south - west.

The Municipality of Matalam is centrally located right at the heart of the province of Cotabato. It is bounded on the East by the municipality of Kidapawan; on the West by Kabacan; on the South by M'lang; and on the North by the municipalities of President Roxas and Carmen. It lies along the Cotabato-Davao national highway occupying the portion of Liguasan marsh in the south and stretches up in the north occupying the large portion of the famous Arakan Valley.

Land Area. The project area has a total land area of 191,499.73 hectares (ha). It consists of 147 barangays.

Table 4-1: Land Area and Number of Barangays

Municipality	Land Area (ha)	No. of Barangay
Kidapawan City	34,007.20	40
Municipality of Magpet	75,536.00	35
Municipality of Makilala	34,356.53	38
Municipality of Matalam	47,600.00	34
Total	191,499.73	147

Land Classification. From the total land area of Kidapawan City, and municipalities of Magpet, Makilala, and Matalam), 66.76% or 127,849 ha are alienable and disposable land, while the rest of the land, 33.24% or 63,647.34 ha are classified as forestland.

Air Quality and Noise. The National Air Quality Status Report (2008-2015) provides data on air quality on a regional level. As of 2015, there were 93 air quality monitoring stations (manual and real-time) nationwide which were situated in highly urbanized cities and also rural areas in different regions of the country. These monitoring stations keep track of criteria air pollutants including total suspended particulates (TSP), particulate matter with diameter of less than 10 microns (PM10), particulate matter with diameter of less than 2.5 microns (PM2.5), sulfur

dioxide (SO₂), nitrogen dioxide (NO₂) and ozone (O₃) following the National Ambient Air Quality Guideline Values (NAAQGV).

Table 4-2 presents the measured annual mean values of air quality parameters in Region 12 from 2008-2015. From 2008-2011, there are two (2) monitoring stations that measured the annual mean TSP while from 2012-2014, one (1) monitoring station located in the Municipal Hall of Midsayap, North Cotabato measured the annual mean PM10. In 2015, continuous monitoring of PM10 was conducted in a station located in the City of Koronadal. Based on the measured TSP and PM10 from 2008-2015, the air quality within Region 12 complies with the NAAQGV limits except for PM10 during 2013-2014. The high concentration of PM10 recorded in 2014 was brought by a sudden increase in the number of monitoring firms during this year.

Table 4-2: Air Quality Parameters Annual Mean Values in Region 12 (2008-2015)

Air Quality Parameter/ Station Location	NAAQGV Limit	2008	2009	2010	2011	2012	2013	2014	2015
Municipal Hall of Metro Kidapawan, South Cotabato and Municipal Hall of Surallah, Cotabato City									
TSP (µg/Ncm)	90 (annual)	83-86	75	73	55-58	n.d	n.d.	n.d.	n.d
Municipal Hall of Midsayap, North Cotabato									
PM10 (µg/Ncm)	60 (annual)	n.d.	n.d.	n.d.	n.d.	51	63	75	n.d
Pedro Acharon Sports Complex, Brgy. Calumpang, General Santos City									
PM10 (µg/Ncm) - continuous	60 (annual)	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	49

Source: DENR-EMB, 2015

*Red font means failure to comply with NAAQGV Limit

*n.d. means no data

As per DENR Air Quality Management Section, the National Air Quality Status Report (2015-2020) is currently being drafted.

According to the DENR-EMB Region 12 Air Quality Management Division, there are no available data on noise level in the region. Noise level measurements will be done during detailed design phase at strategic locations on the areas with sensitive receptors to establish ambient baseline noise levels. The results will be included in the CEMP.

In addition, following the IFC-EHS noise guideline values, noise levels should ideally not exceed the values presented in **Table 4-**. If, however baseline noise levels already exceed the guideline values, IFC-EHS allows a maximum 3 dB(A) increase in noise levels as a result of project activities. Mitigation measures should be implemented to ensure this.

Table 4-3: IFC-EHS Noise Level Guidelines

Receptor	One Hour L _{Aeq} dB(A)	
	Daytime 07:00 – 22:00	Nighttime 22:00 – 07:00
Residential; institutional; educational	55	45
Industrial; commercial	70	70

Climate. Under the Modified Coronas Classification, the project area belongs to Type IV or climate characterized by evenly distributed rainfall throughout the year. Dry season stretches

from November to May with February as the driest month, and July and August as the wettest months. Rainfall ranges from 2.71 inches during summer and as high as 12.09 inches in July.

Average annual rainfall is estimated at 7.07 inches. The city is located outside the typhoon belt and is protected by its surrounding mountain ranges. The climate is conducive to planting cereals, vegetables, fruits, trees, root crops and legumes. Prevailing wind comes from the southeast direction.

Based on a 2017 data from the Climate Change Commission (CCC), North Cotabato is one of the areas in the Philippines with high risk to El Niño – induced drought.

Topography and Soils. Records from the Bureau of Mines indicate that there are potential areas in Kidapawan City that are rich in mineral deposits, but there has been no geological survey conducted determining such presence at commercial value to date. The largest areas of land are classified as sandy-clay loam, covering 48.13% of the total land area, or 16,330 hectares-typical for intensive agriculture. Other soil types include clay loam at 12,335.50 hectares (36.36%) mostly in areas suitable for urban development, and mountain soils which cover 5,360.40 hectares (15.8%) that is best suited for forest/reforestation, parks, and wildlife. The highest water holding capacity parts are in areas classified under mountain soils. The other two soil types have low water holding capacity. About 82.2% of these soil types are suited for agricultural crops while the rest are best suited for reforestation, pasture, parks and wildlife.

Water Resources. Kidapawan City has five (5) major rivers, namely Marble, Mateo, Matingao, Nuangan, and Saguig Rivers. These bodies of water support water requirements for agriculture and domestic use. The city is blessed with abundant fresh water, both ground and surface.

Mt. Apo serves as recharge point, and the areas at the foot of the mountain contain three large reservoirs – the biggest of which are in Barangays Balabag and Perez flowing through the lower slope in Bongolanon, Magpet. These springs are now tapped to households for domestic use.

The major river that runs through the area are the main source of water in the rural barangays, supplying the domestic, industrial and agricultural water requirements of people. The rapid growth on the city's population has likewise created an increase in the demand for potable water. MKWD has still untapped water resources sufficient to meet the said demand even in the next years.

The present source of water for domestic, commercial and institutional demands in MKWD's service area are surface and spring waters.

B. Ecological Resources

Forests. The project area forest land has a total of 63,647.34 hectares. The forestland is categorized into production and protection forest. Production forest is sub-categorized into timber production, agro-forest plantations, watershed areas, agro-forest (non-plantations), and Community Based Management Forest (CBMF) area. Protection forest is sub-categorized into National Integrated Protected Areas System (NIPAS) and non-NIPAS areas. However, like the other forests which were lost due to heavy population pressure, forest conversion to other uses, illegal cutting and timber poaching, the remaining area are threatened due to rampant illegal activities and the lack of effective forest protection programs.

Protected Areas and Buffer Zones. Mount Apo was declared as a National Park by the virtue of Proclamation No. 59 on May 9, 1936. On February 3, 2004, RA 9237 otherwise known as Mt. Apo Protected Area Act of 2003 was enacted which established the Mount Apo Natural Park (MANP) with an area of 54,974.87 hectares (135,845.9 acres); with two peripheral areas of 2,571.73 hectares (6,354.9 acres) and 6,506.40 hectares (16,077.7 acres) as buffer zones, provided for its management and for other purposes. The protected area under the jurisdiction of MANP is stretched in the areas of Davao City; Municipalities of Bansalan and Sta. Cruz, and Digos City in the Province of Davao Del Sur; Municipalities of Magpet and Makilala, and Kidapawan City in the Province of North Cotabato. Furthermore, designated buffer zones are within the same cities and municipalities except for Davao City. The political boundary map of MANP is shown in **Source: DENR-BMB, 2015**

Figure 4-1.



Source: DENR-BMB, 2015

Figure 4-1: Political Boundary Map of Mount Apo Natural Park

Mt. Apo which towers at 10,311 feet above sea level with a total area of 14.6 square kilometers. The majestic mountain is surrounded by moss-covered century-old-trees, captivating flora and fauna, sulfur craters, and massive boulders.

On June 1, 1992, RA 7586 or The National Integrated Protected Areas System (NIPAS) Act was signed into law covering all protected areas whether terrestrial, coastal or marine. This Act was amended on July 22, 2018 with RA 11038 or the Expanded National Integrated Protected Areas System (ENIPAS) Act of 2018 which increases the number of protected areas covered by legislation from 13 to 107, for a total of three million hectares.

Under the Philippine EIS system, areas declared by law as national parks, watershed reserves, wildlife preserves, and sanctuaries are considered as environmentally critical areas (ECA).

Biodiversity. MANP is sanctuary for countless wildlife species, including plants, animals and microorganisms. It is considered as one of ten priority protected areas in the Philippines and is also one of four priority protected areas in the Mindanao Biogeographic Zone.

DENR Biodiversity Management Bureau (formerly the Protected Areas and Wildlife Bureau) identified MANP as a Key Biodiversity Area (KBA) with a total area of 99,091 hectares. There are two (2) critically endangered species (i.e. Philippine Eagle (*Pithecophaga jefferyi*) and abukay (*Cacatua heamatopygia*)), three (3) endangered species, and 28 vulnerable species recorded within the MANP KBA.

For fauna species, there are 272 species of birds recorded, 40% of these or 111 are endemic to Mt. Apo.

Mammalian diversity has a total of 53 species, 49% are endemic: tudaya giant rat (*Bollimus bagobos*), wild pig (*Sus philippinensis*), tarsier (*Tarsius syriacta*), (*Acerodon jubatus*); 3 are listed as threatened: tree shrew (*Urogale Everetti*), *Acerodon jubatus*, and Phil. Brown deer (*Cervus marianus*); and 26 were found out to have economic and cultural values. Most are utilized for food as protein source, extracts from hoofs and toes are common remedy for stomachache, omens observed during rituals and farming practices, and the dispersal of seeds as important ecological values.

There are at least 53 species of Herpetofauna recorded. This include 17 species of amphibians and 36 species of reptile; 10 (36%) are restricted to the Mindanao faunal region: bak-bac (*Rana magna*), lokwak-manobo (*Ansonia mcgregorii*), "tok-tok"manobo (*Kalaula picta*), cobra (*Naja samarensis*), etc. In general, population and conservation status are poorly known and studied; 3 are on the critical list: ibid (*Hydrosaurus pustulatus*), halo and turtle (*Cuora ambionensis*) turtle. A total of 24 species are known to be with local and cultural use which are mostly for food, bait for fish, asthma and other respiratory remedies, and bad omen, as well as a very important indicator of habitat condition.

Table 4-4: List of Critical Fauna Species in MANP

Scientific Name	Common Name	IUCN Conservation Status
Birds		
<i>Pithecophaga jefferyi</i>	Philippine Eagle	CR
<i>Cacatua heamatopygia</i>	Philippine Cockatoo	CR
<i>Basilornis miranda</i>	Mount Apo Myna	NT
<i>Trichoglossus johnstoniae</i>	Mindanao Lorikeet	NT

Scientific Name	Common Name	IUCN Conservation Status
<i>Buceros hydrocorax</i>	Rufous Hornbill	VU
<i>Turdus poliocephalus</i>	Island Thrush	LC
<i>Lanius validirostris</i>	Strong-billed Shrike	-
<i>Pyrrhula leucogenys</i>	Philippine Bullfinch	LC
Amphibians		
<i>Rana magna</i>	Philippine Woodland Frog	NT
<i>Leptobrachium hasseltii</i>	Broad-headed Forest Frog	LC
<i>Ansonia muelleri</i>	Mueller's Toad	LC
<i>Pelophryne brevipes</i>	Mindanao Toad	LC
<i>Oreophryne anulata</i>	Mount Narrow-mouthed Frog	LC
Reptiles		
<i>Cuora ambionensis</i>	Southeast Asian box turtle	VU
<i>Hydrosaurus pustulatus</i>	Philippine sifflin lizard	VU
<i>Sphenomorphus cumingii</i>	Cuming's Eared Skink	-
<i>Brachymeles gracilis</i>	Burrowing Skinks	LC
<i>Varanus salvator</i>	Variable Malay Monitor Lizard	LC
<i>Python reticulatus</i>	Reticulated Python	LC
<i>Naja samarensis</i>	Samar Cobra	LC
Mammals		
<i>Cervus mariannus</i>	Philippine Brown Deer	VU
<i>Cynocephalus volans</i>	Flying Lemur	LC
<i>Urogale everetti</i>	Philippine Tree Shrew	LC
<i>Podogymnura truei</i>	Philippine Gymnure	LC
<i>Acerodon jubatus</i>	Golden-capped Fruit bat	EN

Source: Mount Apo Foundation Inc.

LC=Least Concern, NT=Near Threatened, VU=Vulnerable, EN=Endangered, and CR=Critically Endangered

According to the Mount Apo Foundation, Inc., in terms of flora species, there are eight hundred (800) estimated vascular and non-vascular plant species identified among Mt. Apo's endemics collected between 300 masl and 1000 masl. Actual resource inventory, on the other hand, collected data on five representative habitats which revealed a total of 126 floral species, 50 are considered endemic to Mt. Apo or the Mindanao Faunal Region. These are almaciga, almon, waling-waling, igem, kalantas, . mindanao kalingag, apo bubonan (*Aglaia apoena*) and other species; 18 species are considered to be at risk (e.g. waling-waling, kalantas including a rattan species (*Plectocomia elmerii*), puhutan (*Mangifera altissima*), *Shorea sp.* like almon, mayapis, malaanonang, narig, guijo); 37 species are considered to have economic, cultural and medicinal importance. Most species are used for construction either light or heavy, these include *Shorea sp.* like lauaan, guijo, apitong, and *Bambusa sp.* like buho and bagakay; as fibers like wild abaka (*Musa sp.*), for baskets and containers (rattan and pandan), food for wildlife like balite (*Ficus sp.*), kalingag (*Cinnamomum mercadoii* and *mindanensis*), ulayan (*Lithocarpus sp.*), etc; and other medicinal plants like wild betel nut (*Areco caliso*), saging bundok (*Musa balbasiana*), kalingag, hagimit (*Ficus sp.*), hamindang (*Macaranga bicolor*).

Table 4-5: List of Critical Flora Species in MANP

Family	Scientific Name	Conservation Status
Ferns		
Psilotaceae	<i>Tmesipteris lanceolata</i>	Rare
Cyatheaceae	<i>Cyathea christii</i>	Rare
Grammitidaceae	<i>Ctenopteris pachycaula</i>	Rare

Family	Scientific Name	Conservation Status
	<i>Grammatis torricelliana</i>	Endemic
	<i>Xiphopteris apoensis</i>	Endemic
Ophioglossaceae	<i>Botrychium daucifolium</i>	Rare
Polypodiaceae	<i>Microsorium phanerophlebium</i>	Rare
	<i>Platycterium grande</i>	Rare
	<i>Coryphopteris dura</i>	Rare
Flowering Plants		
Loranthaceae	<i>Scurrula ferruginea</i>	Rare
	<i>Gymnopachys pulcherrima</i>	Endemic
	<i>Decaisnina cumingii</i>	Endemic
	<i>Macrosolen angulatus</i>	Endemic
Nepenthaceae	<i>Nepenthes truncate</i>	Rare
Melastomataceae	<i>Astronia apoensis</i>	Endemic
Meliaceae	<i>Aglaia apoana</i>	Endemic
Myrsinaceae	<i>Ardisia apoensis</i>	Endemic
	<i>Ardisia recemoso-panniculata</i>	Endemic
	<i>Myrsine mindanaensis</i>	Endemic
	<i>Myrsine apoensis</i>	Endemic
Orchidaceae	<i>Acoridium elmeri</i>	Endemic
	<i>Bulbophyllum gnomoniferum</i>	Endemic
	<i>Bulbophyllum lancifolium</i>	Endemic
	<i>Bulbophyllum longipetiolatum</i>	Endemic
	<i>Calanthe davaoensis</i>	Endemic
	<i>Coelogyne elmeri</i>	Endemic
	<i>Dendrobium longilabr</i>	Endemic
	<i>Eria davaoensis</i>	Endemic
	<i>Eria tridens</i>	Endemic
	<i>Liparis linearifolia</i>	Endemic
	<i>Malxis mindanaensis</i>	Endemic
	Piperaceae	<i>Peperomia elmeri</i>
<i>Peperomia rivulorum</i>		Endemic
<i>Piper davaoensis</i>		Endemic
<i>Piper varibracteum</i>		Endemic
Polygalaceae	<i>Polygala venulosa</i>	Endemic
Cornaceae	<i>Mastixia trichomata var clarkeana</i>	Endangered
Mosses		
Dicranaceae	<i>Dacranoloma perarmatum</i>	Endemic
	<i>Dacranoloma leucophyllum</i>	Endemic
Pottiaceae	<i>Pseudosymblypharis pervaginata</i>	Endemic
Hypodendraceae	<i>Hypodendron fusco-mucronatum</i>	Endemic
Orthotricaceae	<i>Macromitrium blumei</i>	Endemic
Pterobryaceae	<i>Symphysodontella subulata</i>	Endemic
Neckeraceae	<i>Pinnatella nana</i>	Endemic
Sematophyllaceae	<i>Trichosteleum brevisetum</i>	Endemic
Trees		
Araucariaceae	<i>Agathis philippinensis</i>	Endangered

Source: Mount Apo Foundation Inc.

Under the Philippine EIS system, areas identified as KBA by the DENR – Biodiversity Management Bureau (BMB) are considered as environmentally critical areas (ECA).

C. Economic Development

City Income and Expenditures. Kidapawan City is classified as a 2nd class city in accordance to Department of Finance Order No.23-08. In 2006, it yielded an income of Php 268.94 Million, of which 73.8 percent constituted internal revenue allotment. Of its Php 314.22 Million total expenditures for the year, 25.9 percent were expended on economic services.

Land Use. Kidapawan City's land is primarily an agricultural area with 56 percent or about 18,998.784 hectares of its total land area devoted to agricultural production. Another 38 percent are utilized for institutional, commercial and residential usage, while the rest are forestlands, mainly within the Natural Park and reservations. Various varieties of exotic fruits thrive in its 40 barangays such as durian, rambutan, mango, mangosteen, lanzones, marang and banana. It rendered a distinction for the City as a fruit bowl of the province. Other crops that are grown in the city are rice, corn, rubber, coconut and sugarcane.

Commerce and Trade. Flower cutting industry is a primary source of livelihood among Cotabateños, especially those residing in Kidapawan City. In addition to ornamental and forest tree seedling, flowers such as roses, anthuriums and orchids are abundantly grown locally providing a very promising and highly profitable source of livelihood and business in the area. Kidapawan is the second largest producer of fruit in the Philippines, after Davao City. Exotic fruits like Durian, Mangosteen, Lanzones, Marang, Singkamas, Rambutan, Banana, and the like are grown and harvested in abundance in the highlands of Mt. Apo, in rural communities in Kidapawan.

Transportation. Existing road networks in Kidapawan City span 866.62 hectares or 2.55 percent of the city's total land area. The largest road networks are found in Barangays Poblacion – 73.71 hectares then followed by Amas with 53.26 hectares and Linangkob with 40.04 hectares.

The latest inventory of national bridges with length, type, and condition based on DPWH Cotabato 1st District Engineering Office is shown in **Table 4-6**.

Table 4-6: Inventory of Bridges by Cotabato 1st District Engineering Office (As of 27 Dec 2019)

No.	Bridge Name	Type	Condition	Length (m)
1	Malitubog Br.	Concrete	Fair	75.00
2	Iruuos Br.	Concrete	Good	25.00
3	Malupog Br.	Concrete	Good	25.00
4	Dalapuay Br.	Concrete	Fair	32.50
5	Balugan Br.	Concrete	Fair	30.72
6	Bulatukan Br.	Concrete	Fair	31.16
7	Tuluan Br. (Old)	Concrete	Fair	24.40
8	Patulangon Br.	Concrete	Bad	18.86
9	Lamitan Br.(Old)	Concrete	Good	23.80
10	Malaang Br.	Concrete	Good	30.60
11	Nuangan Br.	Concrete	Fair	14.40
12	Tuluan Br. (New)	Concrete	Good	30.08
13	Malasila Br. (New)	Concrete	Good	45.98
14	Lamitan Br. (New)	Concrete	Good	25.70
15	Saguing Br. (new)	Concrete	Good	16.41
16	Malaang Br.	Concrete	Good	40.00
17	Sinallangan Br.	Concrete	Good	18.00
18	Malasila Br. (Old)	Concrete	Good	45.98
19	Saguing Br. (Old)	Concrete	Good	23.84

No.	Bridge Name	Type	Condition	Length (m)
20	Malamote Br.	Concrete	Good	20.00
21	Mua-an Br.	Steel	Good	25.00
22	Kambaja Br. 1	Steel	Good	21.33
23	Kambaja Br. 2	Steel	Fair	27.33
24	Small Mateo Br.	Steel	Fair	25.70
25	Matingao Br.	Concrete	Good	60.00
26	Small Mateo Br.	Concrete	Fair	30.65
27	Binuangan Br.	Concrete	Good	26.00
28	Marbol Br.	Concrete	Good	40.25
29	Sumawan Br.	Bailey	Fair	33.75
30	Magpet Br.	Concrete	Good	27.54
31	Kabacan Br.	Steel	Good	41.40
32	Pangao-an Br.	Steel	Good	25.40
33	Big Mateo Br.	Concrete	Good	34.90
34	Kabacan Br.	Concrete	Fair	83.80
35	Tinagasan Br.	Concrete	Good	19.00
36	Tinanan Br.	Steel	Good	43.00
37	Binay Br.	Concrete	Good	40.00
38	Nowa Br.	Concrete	Fair	15.00
39	Badiangon Br.	Steel	Good	45.00
40	San Vicente Br.	Concrete	Good	39.55
41	Pamintuan Br.	Concrete	Good	24.00
42	Lampayan Br.	Steel	Good	15.40
43	Sta. Maria Br. Formerly steel bridge.	Concrete	Fair	21.30
44	Marbel Br.	Concrete	Fair	80.63
45	Mateo Br.	Concrete	Good	42.62
46	Kabacan Br.	Concrete	Good	150.41
47	Dalapuan Br.	Concrete	Fair	33.82
48	Taculen Br.	Concrete	Good	12.05
49	Malamote Br.	Concrete	Fair	14.94
50	Lika Br.	Concrete	Good	29.90
51	Labo Br.	Concrete	Good	20.70
52	Bialong Br.	Concrete	Good	20.72
53	Mlang Br.	Concrete	Good	45.81
54	Paco Br.	Concrete	Good	30.58
55	Mateo Br.	Steel	Fair	46.36
56	Kingdom Hall Br.	Concrete	Good	20.82
57	Malinan Br.	Steel	Fair	16.35
58	Sikitan Br.	Concrete	Good	20.53
59	New Cebu Br.	Concrete	Good	31.80
60	Marbel Br.	Concrete	Good	75.48
61	Del Carmen Br.	Steel	Good	19.22
62	Magpet Br.	Concrete	Good	38.60
63	Kabacan Br. 2	Concrete	Good	31.00
64	Kabacan Br. 1	Concrete	Good	120.25
65	Binay Br.	Concrete	Good	30.70
66	Malatab Br.	Steel	Fair	19.30
67	Malangag Br.	Concrete	Good	20.70
68	Arakan Br.	Concrete	Fair	22.96
69	Ilustre Br.	Steel	Fair	21.38
70	Tinanan Br.	Concrete	Good	60.37
71	Mt. Sinai Br.	Steel	Good	21.30
72	Kinamalig Br.	Concrete	Good	18.00
73	Guibato Br.	Concrete	Good	18.00
74	Diwatex Br.	Concrete	Good	40.00
75	Lolo Santo Br.	Concrete	Fair	18.00

No.	Bridge Name	Type	Condition	Length (m)
76	Matigol Br.	Concrete	Good	45.30
77	Malitubog Br.	Concrete	Fair	75.00

Source: DPWH Cotabato 1st District Engineering Office (As of 27 December 2019)

Power Sources and Transmission. Electricity in the project area is currently being supplied by Cotabato Electric Cooperative (COTELCO). **Table 4-** shows the number of connections by type of users and average consumption as of 2010.

Table 4-7: Number of Connections by Type of Users and Average Consumption (2010)

Category	Connections	Ave. Consumption (KWH/Mo./HH/Connection)
Residential	11,404	65
Industrial	80	9,307
Commercial	1,190	296
Public Building	191	373
Streetlight (Public)	615	67
Total	12,205	10,108

Moreover, based on projection, COTELCO should have an available supply of 37,967,736 kilowatts by year 2020 in order to address increasing needs of electricity by various power users.

Agricultural Development. Kidapawan City's land is primarily an agricultural area with 56 percent or about 18,998.784 hectares of its total land area has been devoted to agricultural production. Aside from various fruits being grown in the area, crops like abaca, rubber, corn, rice, coconut and other vegetables are also grown and harvested.

Tourism Facilities. There are lots of tourist attractions in Kidapawan City, both natural and man-made. One of these is the famous lake Agco Mahomanoy Resort located at the foot of Mt. Apo at Ilomavis, Kidapawan City. It is known for its hot springs. It is operated and managed by the ILocal Agribusiness Partners Multi-Purpose Cooperative.

Within the MANP is the Mandarangan Geological Site which is being promoted as a major educational tourism site. Lake Venado which is hidden among the mountain ranges stood at an elevation of 7,200 feet above sea level. Its crystal waters mirror the twin peaks of Mt. Apo. Lake Agko, on the other hand, is a steaming blue lake where hot and cold springs converged. It stood at an elevation of 4,200 feet above sea level. It is five kilometers from the jump-off point for the mountain trekking at Barangay Ilomavis, Kidapawan City.

Aside from mountain climbing and dipping at the hot lake Agco, tourists may also visit several waterfalls located in Kidapawan City namely, Marbel Falls, Mawig Falls, Kansal Falls and Paniqui Falls.

D. Social and Cultural Resources

Population and Community. Based on the Philippine Statistics Authority (PSA), the estimated population of the project area in 2015 is about 352,608 spread across 144 barangays and is presented in **Table 4-8.**

Table 4-8: Summary of Population in the Project Area, 2015

City/ Municipality	Population
Kidapawan	140,195
Magpet	49,201
Makilala	83,851
Matalam	79,361
Total	352,608

Source: Philippine Statistics Authority (PSA), 2015

Ancestral Domain Areas. The Municipality of Makilala covers lands with Ancestral Domain Claims with a total of 6,423.1000 hectares. Sitio Settlement, Brgy. Buhay, Makilala and Sitio Apoy-Apoy, Brgy. Buena Vida is inhabited by indigenous people (IP), the Bagobo-Tagabawa tribe. Both of these barangays are included in the Bagobo-Tagabawa Indigenous Cultural Communities (ICC) of the four (4) barangays (Batasan, Buhay, Buena Vida, and Biangan) of Makilala, North Cotabato.

In 1977, through R.A. No. 8371 or the Indigenous People's Rights Act (IPRA), the National Commission on Indigenous Peoples (NCIP) was established. The commission is responsible for safeguarding the rights of the indigenous peoples of the Philippines.

Under the Philippine EIS system, areas which are traditionally occupied by cultural communities or tribes issued with Certificate of Ancestral Domain Title (CADT) or Certificate of Ancestral Land Title (CALT) by the NCIP are considered as environmentally critical areas (ECA).

Health Facilities. The project area has a functional Barangay Health Stations (BHS) that provides primary health care services in the community. Continuous engagement in the conduct of health services particularly on maternal health care safeguards the lives of mother and child's vulnerability against possible sickness and diseases. Like maternal care, children have also the rights to avail health services appropriate for their condition and situations that enclosed to Child Care Program. Family planning is also gaining gradual acceptance by people considering the introduction to different contraceptives and the approval of the controversial Reproductive Health Bill, currently known as Republic Act No. 0123.

Sanitation Facilities. Wastewater coming from industrial establishment reveals that the said category generating a volume of 140 m³/day are being disposed in its respective lagoon and/or pond which are normally developed within the compound of its industrial plants and/or plant vicinity.

In the case of domestic, commercial, and hospital, wastewater generated are being disposed through septic tank within its respective compound, while wastewater generated from commercial establishment particularly at the public market are being treated prior to discharging in existing live creeks.

Wastewater generated from domestic uses mostly in residential subdivisions are being disposed through the use of individual household's septic tank, subdivision drainage system connected to creek while the rest are using the open pit method.

Wastewater is ultimately discharged at the Naungan River which runs across the city proper of Kidapawan. In 2014, the river was classified as Class D water body.

Solid Waste Management. The City/ municipalities practices three (3) methods of solid waste disposal: (1) collection and disposal; (2) recycling; and (3) composting.

The City LGU collects garbage/solid wastes in every household daily using garbage trucks. The collected wastes are dumped in a sanitary landfill located at Barangay Onica with an area of 4.80 hectares.

According to CENRO Kidapawan, all households, even those located in remote areas are now being served by garbage collection services. Non-biodegradable wastes are collected and dumped in the sanitary landfill. Composting is recommended to households within remote areas to decompose biodegradable wastes in order to avoid burning and to implement the Clean Air Act within the city.

Educational Facilities. Education services are both undertaken by the public and the private sector in the field of formal and non-formal education both covers the following educational progress on Pre-School; Elementary; Secondary and Vocational/Technical type of education programs.

Socio-economic Conditions. Considerable socio-economic growth in the municipalities gradually increase from time to time noting their significant achievements such as construction and improvement of farm to market roads and bridges, rehabilitation of municipal buildings, construction of additional school building and other public buildings.

5 ANTICIPATED IMPACTS AND MITIGATION MEASURES

This section assesses the impacts of the proposed activities on various environmental components of the subproject site.

Methodology. Anticipated impacts to be considered were assessed through the following activities: (i) gathering of inputs from interested and affected parties; (ii) desktop research of information relevant to the proposed project; (iii) site visit and professional assessment; and (iv) evaluation of proposed design and potential impacts. Categorization of the project and formulation of mitigation measures have been guided by ADB's REA Checklist for Water Supply (Annex 1) and SPS.

A comprehensive screening of environmental impacts is carried out through assessment of general parameters associated with water supply projects against the components of the proposed MKWD subproject and the environment where the facilities will be constructed. A screening checklist was adopted using previous ADB IEE Reports which was developed using various sources such as DENR checklists, ADB's REA Checklist, and World Bank Environmental Source Book. Some items of the checklist may not be applicable to this particular subproject, however, they are still included to indicate its relevance in the screening process.

Impact Assessment. The assessment is made on the following phases of the subproject: (i) pre-construction, (ii) construction, and (iii) operation and maintenance. Results of the environmental impacts screening are summarized in **Table 5-1**.

which shows the impact types and magnitudes for both positive and negative impacts without the mitigating measures and the resulting situations when mitigating measures will be implemented. Discussions of each issue are presented in the succeeding sections. For ease of identification, a summary of the environmental impacts that should be included in the Environmental Management Plan (EMP) is presented at the end of this section (see **Table 5-3**)

Due to the subproject's relatively long operational life, decommissioning or closure in the near or medium term (e.g., 25-50 years) is not envisaged. Furthermore, environmental impacts arising from decommissioning of the proposed MKWD facilities are deemed to be minimal such as: (i) residual waste cleanup is not a major concern since the facilities are not industrial manufacturing plants with potential problems for toxic and hazardous wastes, and (ii) solid wastes from decommissioning is also not a major concern since the structures are mostly made of reinforced concrete and the solid wastes are mostly recyclable materials such as broken concrete materials, reinforcing steel bars used in the structures, structural steel, roofing materials, electrical wires, etc. In the event that decommissioning becomes an option, the appropriate action plan will be drawn up in accordance with the regulatory requirements of the Philippine Government.

Table 5-1: Summary of Environmental Impacts Screening

Environmental Impacts and Risks	Without mitigation	With Mitigation
PRE-CONSTRUCTION PHASE		
Encroachment to environmentally sensitive areas	● -	Δ
Impacts and risks to biodiversity conservation	● -	Δ
Encroachment to historical areas and cultural areas	● -	Δ
Potential competing use of water resource	n.a.	n.a.
Potential nuisance and problems to the public	● -	Δ
Loss of assets (IR concerns)	● -	Δ
Change in land use pattern	Δ -	Δ
CONSTRUCTION PHASE		
Modification of construction site topography	Δ -	Δ
Damage to existing facilities	● -	Δ
Displacement of rare or endangered species	● -	Δ
Soil erosion and sediments of construction sites	● -	Δ
Nuisance/ public inconvenience in pipe laying	● -	Δ
Noise from construction equipment	● -	Δ
Local air pollution due to construction activities	● -	Δ
Oil and other hazardous materials releases	Δ -	Δ
Vehicular traffic congestion and public access	● -	Δ
Hazards to public due to construction activities	● -	Δ
Pollution and health risk due to workers camp	● -	Δ
Increase employment opportunity in work sites	● +	● +
Improper closure of construction sites	● -	Δ
OPERATION AND MAINTENANCE PHASE		
Disruption of freshwater ecosystem	Δ -	Δ
Health hazard due to delivery of poor water quality	● -	Δ
Pollution from increased generation of sewage and sullage	● -	Δ
Noise and air pollution of pumping stations	Δ -	Δ
Ground subsidence due to over-pumping	● -	Δ
Waste generation of filter beds (backwash)	n.a.	n.a.
Pumping stations operational risk and safety	● -	Δ
Water treatment facility operational risk and safety	n.a.	n.a.
Increase employment opportunities	Δ +	Δ +
Future scarcity of water and conflict in water uses due to climate change	● -	Δ

Legend: n.a. = not applicable; Δ = insignificant; ● = significant; + = positive; - = negative

Table 5-2 presents the summary of government environmental compliance documents needed by the sub-project before commencement of construction works, during construction and during operation.

Table 5-2: Summary of Government Environmental Compliance Documents for Water Supply Subproject

Stage of Development	Regulatory Permit	Issuing Agency	Applicable Legislation
Pre- construction	ECC	EMB Regional Office	PD 1586 and its implementing rules and regulations
	Water Permit	NWRB	PD 1067 and its amended implementing rules and regulations
	Land Use Conversion Permit	DAR – Regional Office	DAR Administrative Order No. 01, Series of 2002
Construction	Clearing/Fencing/Excavation Permit	LGU	LGU Ordinance
Operation	Permit to Operate Source Emission Installation	EMB Regional Office	RA 8749 and its implementing rules and regulations
	Compliance with DOH for Philippine National Standards for Drinking Water (PNSDW) 2017		DOH AO 2007-0012

A. Design/ Pre-Construction Phase Considerations

Encroachments. The Municipalities of Magpet and Makilala, and Kidapawan City are within the protected area and buffer zone of the MANP. Among the project components, the location of the Notongon and Matiboggo spring source development and Ilian main box are covered by the Protected Area (PA) zone.

According to RA 11038 or the Expanded NIPAS Act, “protected area refers to identified portions of land and/ or water set aside by reason of their unique physical and biological significance, managed to enhance biological diversity and protected against destructive human exploitation.”

Section 12 of the ENIPAS Act states that considering that PAs are ECAs, the proponent of development projects and activities with potentially significant adverse impacts shall secure an ECC in accordance to the PEISS system. DENR also requires a clearance from Protected Area Management Board (PAMB) before issuing an ECC to a project proponent.

Moreover, the location of the Notongon spring source development in Sitio Settlement, Brgy. Buhay, Makilala is covered by a Certificate of Ancestral Domain Title (CADT). The area is known to be inhabited by the Bagobo tribe, thus, approval of proposed project component should be governed by the NCIP.

Under the PEISS, these two (2) project locations are considered as ECA.

There are no known archaeological and cultural assets in these proposed sites. Nevertheless, precautions will be taken to avoid potential damage to any archaeological and cultural assets by inclusion of provisions in tender and construction documents requiring the contractors to immediately stop excavation activities and promptly inform the authorities if archaeological and cultural assets are discovered. Under the Cultural Properties Preservation Act (Presidential Decree No. 374) in the event that excavators shall strike upon any buried cultural property, suspension of excavation is inevitable and it shall be reported immediately upon occurrence of the event to the Director of the National Museum and shall then take appropriate

actions with regards to the matter. The suspension can only be lifted by the Director of the National Museum. Accordingly, in case of archeological, historical, cultural chance finds, in order to avoid damage to cultural properties, the following steps should be observed: (i) detailed design of all civil works will be located away from all cultural/ archeological/historical properties; (ii) procedures for chance finds of valued relics and cultural values will be stipulated in the contract with contractors in order to avoid damaging such valuable properties; (iii) site supervisors will be on the watch for chance finds; (iii) upon a chance find, all work will be stopped immediately, find will be left untouched, and notify MKWD who in turn will notify the National Museum; (iv) work at the find site will remain suspended until the National Museum allows work to resume.

Mitigation. Section 9 of Republic Act 9237 designated that the PAMB as the highest policy-making body of Mt. Apo Natural Park.

Upon consultation with the PAMB, MKWD was directed to the NCIP. The approval of the project by the PAMB shall be subject to the decision of the NCIP and an official meeting with PAMB will be conducted after NCIP's approval of the Memorandum of Agreement.

Series of consultations and Free, Prior, and Informed Consent) FPIC meetings were already conducted for the proposed source development project. Memorandum of Agreement (MOA) between MKWD and the lot owners was also formulated and is currently for review and approval of NCIP.

Impacts and Risks to Biodiversity Conservation. MANP foster countless wildlife species and identified as a KBA by the DENR-BMB. Wildlife species including identified trigger species may be displaced during site preparation and construction period. These species may also be exposed to human contact, thus, putting them at risk of hunting.

The development of Notongon and Matiboggo spring source will only occupy a small area of the protected area zone, thus, the death, disturbance, and displacement of wildlife species as well as destruction or damage to habitat is anticipated in a small scale and effects are short-term only.

Mitigation. During site preparation, delineation of clearing area through fencing will avoid unnecessary expansion throughout the construction period, thus, minimizing further disturbance to habitat of wildlife species.

Mitigation measures on noise and dust suppression shall also apply to avoid disturbance of sensitive wildlife organisms. All vehicles/equipment to be used should be confined to previously disturbed areas. Disposal area must be confined on solid ground and not occupy marshy substrates.

In order to prevent hunting of wildlife species, poaching and illegal trading of wildlife by workers or nearby residents will not be allowed and shall be closely monitored.

Upon abandonment phase, areas cleared of vegetation should be rehabilitated to near pre-project conditions as possible which would entail reforestation using indigenous species.

Competing Use of Water Resource. Although one project component (Bulacan groundwater source development) is located in a paddy field, issues on competing use of water resources are not expected since the irrigation system sources its supply from surface water. MKWD will also acquire water rights of all the wells and the spring source from the

National Water Resources Board (NWRB) which will ensure that water resources are properly allocated.

Test drills are included and considered in the construction schedule of the project which can take up to three (3) months. In case proposed water sources yield unfavorable results, MKWD has seventeen (17) other sites identified within the area that can be tested.

On the other hand, the Notongon River and Matiboggo River – where the intake structures will be erected – are used by the residents for domestic purposes such as bathing and washing of clothes. Construction of the impounding structures will prohibit them from using the rivers, however, upon operation of the improved water supply system, these residents will be serviced by the MKWD.

Nuisance and Problems to the Public. Potential nuisances and problems coming from the public during construction can be avoided and immediately addressed through consultation and information dissemination to potentially affected people during detailed design and pre-construction phase. Tender documents shall include provisions addressing potential nuisances and problems from the nearby community during construction including environmental management provisions on the following issues: (i) erosion and sediment runoff, (ii) noise and dust, (iii) vehicular traffic, (iv) construction wastes, (v) oil and fuel spillages, (vi) construction camps, and (v) public safety and convenience. In addition, prior to construction works, the contractor shall coordinate with respective offices in acquiring required clearances with regard to electricity, telephone lines, and other utilities/structures that may be affected by construction activities. These shall all be reflected in the construction contracts.

Loss of Assets. The proposed project will not entail any involuntary resettlement and there are no adverse impacts on surrounding structures since the location of proposed project components will be constructed in either land already owned by MKWD or land that will be acquire via negotiated settlement.

Change in Current Land Use Pattern. The location of the groundwater source development in Brgy. Bulacan, Makilala is in an agricultural land (rice field). Change in the land use is deemed to be insignificant since out of 40 hectares of the total rice field area, only 500 sq. meters shall be utilized by the MKWD for source development. Land use conversion shall be approved by the DAR Regional Office.

Climate Change Resilience. While the project aims to improve resilience to climate change by upgrading and/or expanding the existing water system, the system itself may be vulnerable to climate change effects. In particular, raw water supplies (i.e. groundwater) may be exhausted and/or heavy soil (and other phenomena) that impact the delivery system's structural integrity. This can be mitigated by conducting a suitable study to determine the availability (or abundance) of raw water, especially under extremely dry weather conditions. Similarly, the thorough engineering design (DED) will ensure the choice of suitable piping delivery materials to minimize possible ground heave effects (and other related phenomena).

Likewise, relevant engineering specifications are implemented to tackle certain natural hazards (e.g. flood, earthquake). The construction parameters applicable to the identified level of risk will be taken into account in all civil works. Disaster risk mitigation measures will include, among other things, sufficient structural foundation elevation to account for projected or estimated flood depths (i.e. 50-year return period for catchment areas less than 40 km², and 100-year return period for catchment areas more than 40 km²); avoid areas of known seismic risks (e.g. fault lines) as component locations; and ensure structural design complies with applicable standards / codes (i.e. 2015 National Structural Code of the Philippines (NSCP))

and the latest edition of the American Water Works Association (AWWA). During the DED stage, these measures will be examined in detail.

B. Construction Phase Environmental Impacts

Site Preparation. Construction of deep wells, pumping facilities, powerline extension, disinfection facilities, fencing, and pipelines will not involve modification of the construction site topography. Water supply pipelines will follow as much as possible the existing site contour.

Permanent modification of the immediate landscape at the section of Notongon and Matiboggo rivers to be occupied by the intake structure is anticipated, however, considering the design, the type of intake facilities will not create an obstacle for the river water flow, and will not cause significant turbulence flow which will cause bank erosion.

This issue is therefore considered not significant. Upon verification with MKWD, there are no timber species that will be affected by the project during vegetation clearing.

Damage to existing facilities. The existing irrigation system in Bulacanon for the groundwater source development will not be affected by the construction activities. However, while excavating the earth, existing water supply distribution pipelines, side-drains and compound walls may get damaged in few places.

Mitigation. Timely and proper reinstatement of any damage to public or private property must be carried out. A proper inventory of any damages to existing facilities must be kept, and grievances regarding such damages must be addressed with priority.

Soil Erosion and Sediment from Construction Sites. During rainy seasons, exposed soil at the construction site can easily be eroded and carried to the natural drainage system if preventive measures are not established.

Mitigation. In preventing erosion, surface runoff must be controlled using structural erosion prevention and sediment control practices which will divert the storm water flows away from the exposed areas, prevent sediments from moving offsite, and reduce the erosive forces of runoff waters. These measures must be established by the contractor: (i) interceptor dikes, (ii) pipe slope drains, (iii) straw bale barriers, (iv) sediment traps, and (v) temporary sediment basins. Whenever possible, total exposed area shall be minimized.

Nuisance/Public Inconvenience during Pipelaying. The prolonged period of water supply service interruptions during pipelaying works may result to public inconvenience. Dumping of construction materials and solid wastes in water bodies will also cause nuisance to the public aside from affecting water quality and the flow regime.

Mitigation. The contractor shall be required to perform the following: (i) installation or replacement of pipes within the shortest time possible to minimize water supply cut-off periods and/or use of night time schedules, as well as announcement of water supply interruptions two (2) to three (3) days prior to actual cut-off; and (ii) avoid dumping of earth, stones, and solid wastes in water bodies to avoid adverse impact on water quality and flow regime.

Construction Noise. Potential sources of noise may come from vehicles and construction equipment, which can generate noise of 80 dB(A) from a distance of 30 meters while loud noise from sources such as blasting are not anticipated. Residential structures are identified as receptors during the construction of spring source, dam, deep wells, pumping stations, and pipelaying.

Mitigation. Noise impact cannot be mitigated, but it can be lessened by scheduling construction during daytime only. In areas near residential areas or noise sensitive sites, noisy equipment shall not be operated during nighttime to early morning (22:00H – 06:00H). The use of noise suppressors (mufflers) in equipment and vehicles is also recommended. Workers using noisy equipment shall be provided with earplugs as well.

Local Air Pollution Due to Construction Activities. Piles of sand, gravel and waste materials that would be generated during trenching, earthworks, and soil preparation activities can contribute to the total suspended particles in the air. Machineries and heavy equipment used in the construction will also account for vehicular emissions during construction. Without any mitigating measures, dust generation could be significant during dry periods.

Mitigation. Machineries and heavy equipment used in the construction must be regularly maintained and operated and must comply with the requirements of the Clean Air Act regarding vehicle emissions. Piles of sand, gravel and waste materials that would be generated during site clearing should be watered frequently to prevent dust particles from affecting nearby areas. Covers for open stockpiles shall be required to prevent dust generation due to the wind current. Vehicles transporting loose construction materials such as sand, gravel, spoils, and the like shall be provided with tarpaulin cover as well.

Oil and other hazardous materials releases. Aside from the use of fuel, oil, and grease for heavy equipment and vehicles during construction works, the use of paints and solvents may be expected as well. Impacts relating to accidental release of these materials are considered to be insignificant since expected quantities will be relatively small. However, as part of good construction practice, the contractors will be required to conduct an awareness program for all workers regarding the prevention and management of spills and proper disposal of used containers. Fuel and oil shall be stored in a designated secured area provided with an impermeable liner to prevent the accidental spills from seeping into the ground.

Vehicular Traffic Congestion and Public Access. Traffic flow will be disrupted if routes for delivery of construction materials and temporary blockages in heavily traveled highways and narrow streets are not planned and coordinated. Potential traffic congestion is expected due to construction activities, but of minimal magnitude.

Mitigation. Traffic diversion schemes and other traffic management plans should be properly coordinated with the LGU and the local office in charge of traffic management. Prior to implementation of the traffic re-routing plan, the public must be informed in advance. The method of informing the public would be left to the discretion of the proponent. Options include posting notices in public places, in local newspapers, through local radio and television programs or through public address system. Billboards placed in strategic locations will also serve the purpose. It is recommended to place appropriate and sufficient signages at strategic locations to forewarn the public of the expected traffic problem and to suggest alternative routes that they may take. During this period, traffic aides must be assigned to manage the traffic.

Hazards to Public Due to Construction Activities. Inconvenience to the general public which may result to accidents is one of anticipated impacts during construction activities. Pipelaying along the roads as well as movement of construction vehicles and excavations would pose some hazards to the driving public,. There is also risk of people falling down in open trenches since pipelaying trenches are normally left uncovered until pipeline testing is completed.

Mitigation. MKWD and the contractor should ensure that sufficient and appropriate safety warning devices, safety signs, safety nets or safety guards and cover for open ditches must be implemented at strategic locations to ensure the safety of the people. MKWD may also consult the provincial and local government units to delineate the public safety zone or measurable distance prohibiting public entry and other possible forms of encroachment during construction operations.

Pollution and Health Risk due to Workers Camp. During the construction period, workers are expected to erect temporary workers' camps. Due to run-off of from sanitary sewage, wastewater and solid wastes brought by workforce, potential pollution may occur as a result of improper waste disposal.

Mitigation. The construction contractor shall be required to carry out the following: (i) install proper sanitary facilities to prevent the indiscriminate discharge of sanitary wastes at the camps' surroundings, (ii) implement proper solid waste management, and (iii) prevent surface runoffs from flowing into the workers camps to avoid carrying away any contaminants. The contractor shall be required to use temporary diversion drains, catch drains, and silt-traps at these camps.

Improper Closure of Construction Sites. Generation of solid wastes (e.g. used wood materials, steel works cuttings, paint and solvents containers, used oil from equipment, unused aggregates, etc.) after construction activities may cause aesthetic problems and potential contamination of the surrounding environment.

Mitigation. The project site shall not be abandoned in disorderly condition but instead restored for functional use. Following the completion of the construction, the MKWD shall deactivate the project offices, and the construction yard including unserviceable vehicles and equipment. Wastes arising from the abandonment must be taken care of the contractor.

Increase Employment Opportunities at Work Sites. Construction activities require a considerable number of workers. The impact would be beneficial and significant to people since employment opportunities in the area will increase.

Enhancement. A robust "local first" hiring policy will be designed and implemented by the contractor in coordination with local officials and community leaders especially at the barangay and municipal levels. No preference in terms of gender during the hiring process will be observed.

C. Operation Phase Environmental Impacts

Disruption of Freshwater Ecosystem. Water intake structures can interfere or disrupt ecosystem functions in the source waters, as well as downstream water bodies. Long-term water withdrawal may adversely affect fish and shellfish populations and with high volume withdrawals, can trap and impinge fish and invertebrates, alter natural flow rates, degrade shorelines and riparian habitats, and can alter the aquatic community structure and diversity of species.

However, high volume withdrawal is not anticipated, and the withdrawal will not result in altered flow rates, or degraded stream bottoms or riparian habitats.

Health Hazard Due to Delivery of Poor Water Quality. Delivery of water with poor quality to distribution system is a health risk to the consumers. Threats of contamination due to presence of bacteria, viruses, protozoa, or chemicals are usually present in raw water sources up to the

service connections, thus, post-treatment contamination is still anticipated as the water is transported to the consumer and considered to be a significant impact.

Mitigation. MKWD shall ensure that the potable water consistently passes the requirements of the Philippine National Standards for Drinking Water (PNSDW) of 2017. To achieve this, implementation of the water safety plan with regular water quality monitoring shall be undertaken.

A water safety plan shall enable MKWD to (i) prevent contamination of its water sources, (ii) treat the water to reduce or remove contamination that could be present to the extent necessary to meet the water quality targets, and (iii) prevent recontamination during storage, distribution and handling of drinking water.

For controlling microbial contamination, gas chlorine disinfection will ensure that water will be chlorinated and adequate residual disinfection will be maintained. The standards for chlorine residual of the 2017 PSDW are: (i) 0.3 mg/l minimum for detection at the farthest point of the distribution system and (ii) 1.5 mg/l maximum for detection at the farthest point of the distribution system.

Pollution from Increased Generation of Sewage and Sullage. Since majority of the water supply are used for domestic purposes, increasing the water supply to the service area will also increase the generation of sewage and sullage. This wastewater will contribute to pollution of the surrounding areas if not addressed properly and impact would be significant.

Mitigation. Sewage and sullage will be discharged to the individual septic tanks system of the water consumers. The septic tank system will: (i) treat the wastewater and reduce the pollution potential and (ii) reduce the public's exposure to untreated domestic wastewater. This will help in avoiding disease transmission.

Noise and Air Pollution of Pumping Stations. Pump systems including electric motors will be housed in buildings that provide noise attenuation. The pumping station will also run on electricity to be supplied by the local power companies. Hence, no increased noise level and air pollution during operation phase. On the other hand, during occasional brownout events, a diesel-fueled electricity generator set will be used. In this case, MKWD shall secure a Permit to Operate (PTO) from DENR to ensure compliance with the Clean Air Act. There are no anticipated operational activities that will cause dust generation. Mitigating measures are therefore not necessary for noise and air pollution.

Ground Subsidence Due to Over-pumping. Excessive groundwater pumping will result to continuous reduction in the groundwater level in the aquifer which at some point will eventually lead to the inability of the aquifer to supply water in an economical or even physical sense. Ground subsidence is the result of soil compression when the drop in the water level changes the soil structure. This can result in significant damage to properties and structures and therefore must be monitored thoroughly by the MKWD since its water sources are mainly groundwater.

Mitigation. Following the operating design of the well below its safe yield will avoid over pumping the aquifers. Operating below the well's safe yield will ensure long-term balance between the water that is naturally and artificially recharged to an aquifer and the groundwater that is pumped out. When the water pumped out is higher than the water recharged, the water level in the aquifer then drops resulting to ground subsidence. MKWD should follow all the evaluation of test pumping results and available groundwater drawdowns when choosing the sizes of pump and motor to be installed on the wells. Furthermore, MKWD should monitor the groundwater level of each well to determine if continuous reduction in the groundwater level in the aquifer is occurring through the use of a wire to be attached to an

ordinary electrical tester and lowered into the well, a common practice in the Philippine water industry. The water level below ground surface will be measured from the distance where the electrical tester indicated contact with the water level.

Pumping Stations and Water Treatment Operational Risk and Safety. The proposed MKWD pumping stations will not inherently pose risks to the environment and people. These facilities will not use flammable materials during normal operations. Conditions of extreme conditions of temperature and pressure are not to be expected. Use of diesel-powered generators as stand-by power source is considered safe since these are equipped with safety devices and leak detection for fuel tanks. However, since MKWD will be using chlorine gas as disinfectant in the water treatment operation, mishandling of this toxic gas pose a threat to people and the environment and the impact is considered to be significant.

Mitigation. MKWD shall establish a health and safety program for its workers that will tackle safety and handling of chlorine as well as measures to take in the event of a chlorine leak. A written safety program shall be distributed to operators with the following information: (i) rules and specific safety procedures, (ii) contact numbers of emergency response offices, and (iii) location of safety equipment (e.g. leak detectors, eyewash, respirators, etc.). Workers must also be equipped with adequate Personal Protective Equipment (PPEs) especially when handling chlorine gas.

Increase Employment Opportunities. Operation and maintenance activities require a considerable number of workers. The impact would be beneficial to people since employment opportunities in the area will increase. However, since the additional water supply facilities are not labor intensive, the expected number of additional workers will be small and the impact is considered less significant.

Lower Precipitation and Higher Temperature due to Climate Change. As mentioned in the previous sections, Cotabato is one of the areas in the Philippines most vulnerable to drought and are experiencing seasonal aridity and recurrent droughts according to CCC. Data from the Philippine Atmospheric, Geophysical and Astronomical Services Administration's (PAGASA) showed that as observed from 1971-2000 (baseline), the lowest amount of rainfall in the Province of South Cotabato occurs during northeast monsoon or months of December, January, and February while the highest temperature occurs during the summer months of March, April, and May. Moreover, recent data revealed that in 2050, the mean amount of rainfall during this season will decrease by 0.8 to 1.3% while mean temperature will increase by 1.3 – 1.8 °C, depending on the country's collective amount of emission.

Mitigation. Adaptation to climate change needs to be looked closely in the WD's long-term planning in view of PAGASA's predictions of weather pattern changes. These changes would affect water supply sources, whether surface water and/or groundwater, as well as the concurrent issue of potential water uses conflict in the future.

To protect the water supply against the variability of the seasons, runoff and usage, the following may be done: (i) building additional water storage infrastructure, such as reservoirs or storage tanks, to provide buffers; (ii) adjusting infrastructure designs and introducing flexibility in water systems operations can build resilience to changing climatic conditions such as changes in the seasonality of precipitation; (iii) diversifying water supply sources—including conjunctive use of surface and groundwater, reuse and recycling, and use of household-level water sources such as roof water harvesting—can mitigate the impacts of weather-related disruptions on any given component of the water supply system.

Potential Conflict on Water Uses. Water demand is expected to increase as a result of population growth which may eventually create conflict on different water uses.

Mitigation. MKWD is expected to adopt an integrated water resources management within the watershed to improve the allocation and management of scarce water resources in the context of climate change. An agreement with DENR and the local government for the assignment of a watershed area to the WD will be worked out. The agreement will include the active participation of the municipality and watershed barangays. Meanwhile, the WD will continue to implement its tree planting program in coordination with the barangays.

After careful and thorough assessment of impacts and risk screening, this proposed subproject is expected to have an overall beneficial net effect on the water supply system of the WD because it will improve the water resiliency in the Province of South Cotabato. In addition, the additional service coverage area will provide a clean water supply to more people.

Table 5-3 lists the environmental impacts and risks that requires mitigation and shall be carried to the EMP Section.

Table 5-3: Environmental Impacts and Risks for Inclusion in EMP

Environmental Impacts and Risks	Without mitigation	With Mitigation
PRE-CONSTRUCTION PHASE		
Encroachment to environmentally sensitive areas	● -	△
Impacts and risks to biodiversity conservation	● -	△
Encroachment to historical areas and cultural areas	● -	△
Potential nuisance and problems to the public	● -	△
Loss of assets (IR concerns)	● -	△
Change in land use pattern	△ -	△
CONSTRUCTION PHASE		
Damage to existing facilities	● -	△
Displacement of rare or endangered species	● -	△
Soil erosion and sediments of construction sites	● -	△
Nuisance/ public inconvenience in pipe laying	● -	△
Noise from construction equipment	● -	△
Local air pollution due to construction activities	● -	△
Vehicular traffic congestion and public access	● -	△
Hazards to public due to construction activities	● -	△
Pollution and health risk due to workers camp	● -	△
Increase employment opportunity in work sites	● +	● +
Improper closure of construction sites	● -	△
OPERATION AND MAINTENANCE PHASE		
Health hazard due to delivery of poor water quality	● -	△
Pollution from increased generation of sewage and sullage	● -	△
Ground subsidence due to over-pumping	● -	△
Pumping stations operational risk and safety	● -	△
Future scarcity of water and conflict in water uses due to climate change	● -	△

Legend: n.a. = not applicable; △ = insignificant; ● = significant; + = positive; - = negative

The subproject is unlikely to cause significant adverse impacts. However, there are no impacts that are significant or complex in nature, or that needs an in-depth study to assess the impact. The potential adverse impacts that are associated with design, construction, and O&M can be mitigated to acceptable levels with the recommended mitigation measures.

6 PUBLIC CONSULTATION AND INFORMATION DISCLOSURE

A stakeholder consultation and participation were implemented as part of the preparation and implementation strategy. This were done to address the stakeholders' needs and disclosure of the project details and the benefits they shall receive. The consultation process during the project preparation has solicited inputs from a wide range of stakeholders, including government officials, residents in the vicinity of the subproject sites, marginalized/vulnerable beneficiary groups, and project affected persons (APs).

Affected persons were consulted at various stages in the project cycle to ensure:

- (i) incorporation of views/concerns of APs on compensation/resettlement assistance and environmental impacts and mitigation measures;
- (ii) inclusion of vulnerable in project benefits;
- (iii) identification of help required by APs during rehabilitation, if any; and
- (iv) avoidance of potential conflicts/smooth project implementation.

Key stakeholders were consulted during the project preparation, EMP implementation, and project implementation including the following:

- (i) Elected representatives, community leaders, religious leaders and representatives of community-based organizations;
- (ii) Local government and relevant government agency representatives, including local authorities responsible for land acquisition, protection and conservation of forests and environment, archaeological sites, religious sites, and other relevant government departments;
- (iii) Affected indigenous people community;
- (iv) NCIP representatives;
- (v) WDs representatives and consultants, and
- (vi) ADB representatives

The public consultation activities conducted by the MKWD with its stakeholders were carried out in preparation for securing of the ECC for the proposed source developments in the three (3) municipalities.

Under the Indigenous Peoples' Rights Act, a "free and prior informed consent" (FPIC) process is required prior to the extraction of resources from indigenous ancestral domains and lands. For this subproject, series of FPIC consultations were undertaken in order to safeguard indigenous rights and interests and allow them to raise matters that concern them. FPIC is a critical tool in the realization of indigenous self-determination, promoting community participation in decision-making, and mitigating the risk of social conflict around natural resource projects.

The summary of the activities conducted is presented in **Table 6-1** while the issues and concerns raised is summarized in

Table 6-2.

Table 6-1: Summary of Activities Conducted

Date	Activity	Number of Attendees	Location	Topics Discussed
13 June 2019	First Community Assembly	150 persons	Sitio Settlement, Brgy. Buhay, Makilala	Utilization of Notongon Source for Level III Water System
20 June 2019	Second Community Assembly	155 persons		
06 August 2019	Third Level for Free and Prior Information Consent (FPIC) Process for Notongon Project	43 persons		
09 September 2019	Review and Evaluation of Memorandum of Agreement (MOM) for Notongon Spring Source Project	35 persons	MKWD Mess Hall, Lanao, Kidapawan City	Utilization of Notongon Source for Level III Water System
10 October 2019	Memorandum of Agreement Signing Ceremony on the Notongon Intake Development Project	39 persons	Covered Court, Barangay Buenavida, Makilala, Cotabato	Utilization of Notongon Source for Level III Water System
28-April 2020	Meeting with Matiboggo Claimants	12 persons	MKWD Covered Court, Lanao, Kidapawan City	Utilization of Matiboggo Source for Level II Water System

Table 6-2: Summary of Issues and Concerns Raised

Activity	Group Represented / Representative	Issues / Concerns Raised	Proponent's Response
1. First Community Assembly		Determination of the decision-making or consensus-building processes	The body agreed for the Barangay Buhay CADT
		Consensus on the involvement of NGOs/CSOs	The body agreed that there will be no involvement of other NGOs/CSOs. That they will just recognized the National Commission on Indigenous Peoples (NCIP)
2. Second Community Assembly	Participant	From the proposed dam, how many kilometers will be covered upstream? If his area will be included.	There will be a secondary survey for final validation together with NCIP to determine the exact hectarage and stressed out to them that there will be no fencing to be done but it will just marked the boundaries like bamboo and other trees.
	Participant	Benefits to be given to occupants where pipes will pass through.	The body will be needing manpower when the project commence. They will be given priority in terms of hiring job orders for excavation, hauling, backfilling and the likes.
	Participant	Job opportunities for the four (4) barangays	Upon commencement of the project, there are a lot of job opportunities that will be opened and settlers in the areas will be given priority.
3. Third Level for Free and Prior Information Consent (FPIC) Process for Notongon Project	Indigenous Cultural Community of Barangay Buhay	Royalty Tax (one centavo per cubic meter)	Time should be considered to look for legal basis because Water District is a government owned and controlled corporation (GOCC).
		Tribal Office	The body can only provide Tribal Hall because of limited funds on this purpose. The body agreed that MKWD will only provide a Tribal Hall instead of office.
		Scholarship for all levels	It is informed that tuition for elementary and high school is already free especially in public schools. It is suggested that the body will have two (2) college students and they will take technical, engineering or forestry course. After finishing the course and passing the CSC Exam, they guarantee that they will be hired in the office.
		17 lot owners must be hired as regular employees of MKWD and the said job	The body agreed for the hiring of 17 lot owners as casual employees.

Activity	Group Represented / Representative	Issues / Concerns Raised	Proponent's Response
		opportunity could be inherited by the next of kin.	
		Water facilities given to Barangay Buhay	Endorsement to the technical team who will evaluate the location and number of beneficiaries.
		Road rehabilitation to Barangay Buhay to settlement	It is cleared that the mandate of MKWD is water supply only. Road rehabilitation is under DPWH and LGU.
4. Review and Evaluation of Memorandum of Agreement (MOM) for Notongon Spring Source Project		Scholarship for two (2) college students with an allowance of ten thousand pesos (Php 10,000) per semester	It has been resolved that it will remain to two (2) scholars and will re-evaluate it after five (5) years.
		Royalty – 1 centavo per cubic meter, based on actual utilization of the gross production.	It is suggested to the body to fix the amount of royalty to ten thousand pesos (Php 10,000) per month and payment shall be last at the end of March, June, September and December. Both parties agreed on this.
		Case of cutting trees during the cleaning and implementation of the project	The timber will be given to the IP community. They reached to a decision to include it in the MOA.
6. Meeting With Matiboggo Claimants	Brgy. Buenavida, Makilala	Initial feedback and approval of CADT Officials of Brgy. Buenavida Makilala	Development and utilization of Matiboggo source is favored
		Processing of MOA and FPIC	Datu Odo will coordinate to NCIP to fasten the FPIC and MOA processing.
		Other Matters – Series of schedules for evaluation of Matiboggo Source	Assistance will be given to MKWD personnel visiting the area

A copy of the minutes of the meeting is presented in the **Annex 4**.

7 ENVIRONMENTAL MANAGEMENT PLAN (EMP)

The EMP addresses the need for mitigation and management measures for the MKWD subproject. This includes: (i) mitigating measures to be implemented, (ii) required monitoring associated with the mitigating measures, and (iii) implementation arrangement. Institutional set-up is presented in the implementation arrangement and discusses the roles during implementation and the required monitoring. It also outlines the requirements and responsibilities during pre-construction, construction, and operation phases. The EMP shall be included in the contract documents to guarantee an environmentally responsible procurement. Tender documents and construction contracts shall include environmental management provisions on the following issues: (i) erosion and sediment runoff, (ii) noise and

dust, (iii) vehicular traffic, (iv) construction wastes, (v) oil and fuel spillages, (vi) construction camps, and (vii) public safety and convenience.

A. Environmental Mitigation

Table 7-1 presents the information on: (i) required measures for each environmental impact that requires mitigation, (ii) locations where the measures apply, (iii) associated cost, and (iv) responsibility for implementing the measures. Details of mitigating measures are already discussed in **Section 5** where the need for mitigation of each impacts was determined in the screening process.

Table 7-1: Environmental Mitigation Plan

Project Activity	Potential Environmental Impact	Proposed Mitigation Measure or Enhancement Measure	Location	Mitigation Cost	Responsibility Implementation/ Supervision
PRE-CONSTRUCTION PHASE					
Excavation requirements	Excavation requirements	<ul style="list-style-type: none"> Provision in tender documents that will require construction activities to be stopped immediately upon discovery of any archaeological and cultural relics and promptly reporting to the National Museum 	Pipeline trenches, civil works excavations	Part of detailed design cost	Design Consultants/ LWUA Project Management Unit (PMU)
Indigenous People concerns	Potential violation of local laws on indigenous people	<ul style="list-style-type: none"> Creation of a Memorandum of Agreement (MOA) with the IPs to be approved by the NCIP Consultation with the affected IP community regarding the expected impacts and proposed mitigation measures of the project 	Notongon and Matiboggo Spring development area	Part of detailed design cost	MKWD Project Implementation Unit (PIU), Design Consultants/ LWUA PMU
Social and community concerns	Potential nuisance and concerns from the public	<ul style="list-style-type: none"> Consultation with the affected communities regarding the expected impacts and proposed mitigation measures of the project Provisions in the tender documents addressing the potential nuisances and concerns from the public during construction phase 	Pipelines routes, deep wells, spring, development, and pumping stations	Part of detailed design cost	MKWD Project Implementation Unit (PIU), Design Consultants/ LWUA PMU
Preparation of detailed engineering design	Natural hazards, such as earthquake and flood	<ul style="list-style-type: none"> Structural integrity of the water supply system shall conform with the requirements of the 2015 National Structural Code of the Philippines (NSCP) and the latest edition of the American Water Works Association (AWWA) Standards for wells, pipes, valves, and fittings Projection of flood level using 50-year return period for catchment areas less than 40 km², and 100-year return period for catchment areas more than 40 km² 	All structural components	Part of detailed design cost	Design Consultants/ LWUA PMU
	Project-related complaints	<ul style="list-style-type: none"> Establishment of a grievance redress mechanism (GRM). 			MKWD PIU, PMU/ Supervision Consultant, LWUA

Project Activity	Potential Environmental Impact	Proposed Mitigation Measure or Enhancement Measure	Location	Mitigation Cost	Responsibility Implementation/ Supervision
Site preparation	Land use conversion	<ul style="list-style-type: none"> If the test drill production and quality result is favorable and/or feasible, land use conversion shall be applied to the DAR Regional office. 	Source development in Bulacanon, Makilala	Included in construction contract cost.	Contractor/ MKWD PIU, PMU, Supervision Consultant, LWUA, DENR
	Vegetation clearing	<ul style="list-style-type: none"> Areas to be cleared of vegetation should be delineated clearly (by fencing) so that unnecessary expansion of clearing should be avoided Areas cleared of vegetation should be rehabilitated to near pre-project conditions as possible. This would entail reforestation using indigenous species 	All project sites especially Notongon and Matiboggo Spring area and Sitio Ilian	Included in construction contract cost.	Contractor/ MKWD PIU, PMU, Supervision Consultant, LWUA, DENR
	Improper EMP implementation	<ul style="list-style-type: none"> The Contractor shall assign an Environmental, Health, and Safety (EHS) Officer who shall ensure the proper implementation of the EMP and EMoP. A contractor's environmental management plan (CEMP) shall be prepared and cleared by PMU, PIU and ADB prior to start of construction. The CEMP will update the EMP to update baseline information and make it more site-specific and include detailed management plans such as traffic management plan, spoils and wastes management plan, community and occupational health and safety plan, etc. 	All project sites	Included in construction contract cost.	Contractor/ MKWD PIU, PMU, Supervision Consultant, LWUA
	Non-compliance with government requirements	<ul style="list-style-type: none"> All applicable government permits such as ECC/CNC, water permit, permit to operate, etc. shall be secured prior to start of construction. 	All project sites	Included in construction contract cost.	Contractor MKWD PIU/ PMU, Supervision Consultant, LWUA

CONSTRUCTION PHASE

Pipelaying and other civil works	Soil erosion and sediments from construction sites during rainy periods	<ul style="list-style-type: none"> Minimize total exposed area Use of structural erosion prevention and sediment control practices which may include: interceptor dikes, pipe slope drains, straw bale barriers, sediment traps, and temporary sediment basins 	Pipelines routes, deep wells, spring, development, and pumping stations	Incorporated in construction contract	Contractor/ MKWD PIU, Supervision Consultants
	Nuisance / inconvenience to the public	<ul style="list-style-type: none"> Minimize water supply cut-off periods and /or use of nighttime schedules, as well as announcement of water supply interruptions 2-3 days prior to actual cut-off Avoid dumping of earth, stones, and solid wastes in water bodies 	Pipelines routes	Incorporated in construction contract	Contractor/ MKWD PIU, Supervision Consultants
	Nuisance from noise of	<ul style="list-style-type: none"> All heavy equipment and machineries shall be fitted with 	Pipelines routes, deep	Incorporated in	Contractor/

Project Activity	Potential Environmental Impact	Proposed Mitigation Measure or Enhancement Measure	Location	Mitigation Cost	Responsibility Implementation/ Supervision
	construction equipment and vehicles	noise dampening devices that are in good condition. <ul style="list-style-type: none"> Inform workers to minimize their activities to avoid disturbing the nearby communities. Avoid operating noisy equipment during nighttime (22:00 – 06:00) Vehicle horn signals will be kept at a low volume, if necessary. All active vehicles and equipment should be confined to previously disturbed areas 	wells, spring, development, and pumping stations	construction contract	MKWD PIU, Supervision Consultants
	Air pollution due to construction activities	<ul style="list-style-type: none"> Water spraying for dust control Construction materials with potential for significant dust generation shall be covered Tarpaulin cover for trucks transporting loose construction materials Avoid smoke belching equipment 	Pipelines routes, deep wells, spring, development, and pumping stations	Incorporated in construction contract	Contractor/ MKWD PIU, Supervision Consultants
	Traffic congestion and hindrance to access	<ul style="list-style-type: none"> Traffic diversion schemes and other traffic management plans should be properly coordinated with the LGU and the local office in charge of traffic management, and consulted with the stakeholders. Prior to implementation of the traffic re-routing plan, the public must be informed in advance. 	Pipelines routes	Incorporated in construction contract	Contractor/ MKWD PIU, Supervision Consultants
	Pollution, accident, and health risks to workers	<ul style="list-style-type: none"> All domestic wastes will be disposed of in accordance with the construction and operations waste management procedures. Provision of sanitary or portable toilets to laborers Implementing a solid waste management plan Provision of surface runoffs control such as temporary diversion drains, catch drains, and silt-traps Provision of personal protective equipment (PPE) to workers and requiring them to use PPE appropriate to their work Conduct HSE training to workers, including HIV and STD awareness 	Workers camp; construction sites	Incorporated in construction contract	Contractor/ MKWD PIU, Supervision Consultants
	Hazard to public due to construction activities	<ul style="list-style-type: none"> Implement road safety plan and safety measures including warning signs to alert people of hazards around the construction sites, barricades, and night lamps for open trenches in pipelaying 	Pipelines routes, deep wells, spring, development, and pumping stations	Incorporated in construction contract	Contractor/ MKWD PIU, Supervision Consultants
	Increase employment opportunities	<ul style="list-style-type: none"> A robust “local first” hiring policy will be designed and be implemented in coordination with local officials and community 	Pipelines routes, deep wells, spring, development,	No cost	Contractor/ MKWD PIU, Supervision Consultants

Project Activity	Potential Environmental Impact	Proposed Mitigation Measure or Enhancement Measure	Location	Mitigation Cost	Responsibility Implementation/ Supervision
		leaders especially at the barangay and municipal levels. <ul style="list-style-type: none"> At least 50% hiring of unskilled labor from local residents will be implemented as per RA 6685. No preference in terms of gender during the hiring process will be observed. Adopt a just compensation scheme to avoid future labor and management conflicts. 	and pumping stations		
	Potential risk to wildlife species	<ul style="list-style-type: none"> Poaching and illegal trading of wildlife by workers or nearby residents will not be allowed and shall be closely monitored 	Notongon and Matiboggo Spring area and Sitio Ilian	No cost	Contractor/ MKWD PIU, Supervision Consultants
Rehabilitation and closure of construction sites	Improper closure of construction sites	<ul style="list-style-type: none"> Removal and proper disposal of all construction wastes and implement surface restoration Disposal area must be confined on solid ground and not occupy marshy substrates 	Pipelines routes, deep wells, spring, development, and pumping stations	Incorporated in construction contract	Contractor/ MKWD PIU, Supervision Consultants
OPERATION PHASE					
Water production	Health hazard due to delivery of poor water quality	<ul style="list-style-type: none"> Water disinfection using chlorine Water safety plan implementation Regular water quality monitoring in compliance with the 2017 Philippine National Standards for Drinking Water (PNSDW) 	Pipelines routes, and pumping station	Part of operation & maintenance costs	MKWD / LWUA
Water consumption	Pollution from increased generation of sewage and sullage	<ul style="list-style-type: none"> Use of individual septic tanks system of water consumers 	Subproject water supply service area	Cost of water consumers	Water consumer/ LGU
Groundwater pumping (spring and deep wells)	Potential ground subsidence due to excessive pumping	<ul style="list-style-type: none"> Groundwater pumping at lesser than the safe yield of each well 	Pumping stations	No cost	MKWD / LWUA
Pumping station operation	Pumping station operational risk and safety	<ul style="list-style-type: none"> Implementation of a health and safety program for its workers Workers must be equipped with adequate Personal Protective Equipment (PPEs) especially when handling chlorine gas. 	Pumping station	Part of capital, operation & maintenance costs	MKWD / LWUA
Abstraction of groundwater	Scarcity of water supply and conflict in water uses	<ul style="list-style-type: none"> Integrated water resources management of a watershed will be initiated by MKWD through a MOA with DENR. 	Watershed area of South Cotabato province	Part of operation cost	MKWD / LWUA

Although details of the required mitigating measures are already discussed in the screening for impacts, the following items are discussed further to highlight their importance: (i) tender documents and construction contracts, (ii) contractor's environmental management plan, (iii) construction site management plan, (iv) water safety plan, (v) source protection study and wellhead protection plan, and (vi) unanticipated environmental impacts.

Contractor's EMP (CEMP). The CEMP shall be prepared by the civil works contractor prior to start of construction and needs to be approved by MKWD's PIU. This is a refinement of the MKWD subproject's EMP with details on staff, resources, implementation schedules, monitoring procedures and specific measures and procedures on how the contractor will implement the EMP during construction and allocate a budget. This will be the basis for monitoring the environmental performance of the contractor by the PMU, MKWD PIU, construction supervision consultants, and other monitoring parties. Moreover, the construction supervision consultant will be able to manage the specific items expected from the contractor regarding environmental safeguards. With the CEMP, MKWD can easily verify the associated environmental requirements each time the contractor will request approval for work schedules.

The CEMP shall include the conduct of baseline environmental assessment within the project areas including ambient air quality and noise level, water quality, aquatic ecology, and other environmental resources that could be affected by the project through environmental surveys.

Ambient air quality and noise level shall be established along sensitive receptors near the project area (e.g. residential communities, schools, commercial areas, etc.). Water quality of the nearest water body shall also be determined prior to construction. Naungan River is the nearest receiving water body from the communities. Establishing the water quality of Naungan River shall be included in the baseline assessment if deemed necessary. The existing conditions of the freshwater ecosystem in Notongon and Matiboggo River (upstream and downstream), where the intake structures will be constructed, shall also be assessed if deemed necessary.

The CEMP shall provide details on specific items related to the environmental aspects during construction. It shall include specifications on requirements for dust control, erosion and sediment control, avoidance of casual standing water, management of solid wastes, workers' camp sanitation, pollution from oil, grease, fuel spills, and other materials due to the operation of construction machineries, safety and traffic management, avoidance of inconveniences to the public, air and noise pollution control. It shall also include guidance on the proper design of the construction zone, careful management of stockpiles, vegetation, topsoil, and vehicles and machinery.

See **Annex 3** for sample CEMP outline.

Water Safety Plan. Preparation of a water safety plan is advocated by WHO for ensuring the delivery of safe drinking water to the consumers using a comprehensive risk assessment and risk management approach that covers the process of sourcing water supply up to the distribution to consumers. Similarly, MKWD shall manage the environmental risk to its water supply system in a broader scale. A water safety plan shall enable MKWD to (i) prevent contamination of its water sources, (ii) treat the water to reduce or remove contamination that could be present to the extent necessary to meet the water quality targets, and (iii) prevent recontamination during storage, distribution and handling of drinking water. It is an approach that will clearly show the desire of the MKWD in applying best practices in ensuring delivery of potable water to its consumers.

Source Protection Study. Preparation of the source water assessment and wellhead protection study will be included in the water safety plan as the source protection study. A source water assessment evaluates the susceptibility of a water supply source to potential contaminants that could adversely affect the quality of water supply source identified which will then be used to prepare the wellhead protection plan. Wellhead protection prevents drinking water from becoming polluted by managing potential sources of contamination in the area with influence to the groundwater supplies to the well. The wellhead protection plan includes designating the protection area or capture zone. A wellhead protection plan is

particularly important for MKWD since its groundwater sources are within or near built-up areas and the risk of contamination of these sources is high.

Unanticipated Environmental Impacts. In case of occurrence of unanticipated environmental impacts during project implementation, MKWD shall prepare a supplementary environmental assessment and EMP to assess the potential impacts and outline mitigation measures and resources to address those impacts.

B. Environmental Monitoring

Table 7-2 presents the information on: (i) aspects or parameter to be monitored, (ii) location where monitoring is applicable, (iii) means of monitoring, (iv) frequency of monitoring, (v) responsibility of compliance monitoring, and (vi) cost of monitoring. The PMU shall prepare quarterly environmental monitoring reports to be submitted to LWUA management detailing the status of mitigating measures implementation.

Table 7-2: Environmental Monitoring Plan

Aspects / Parameters to be monitored	Location	Means of Monitoring	Frequency	Implementation Responsibility	Compliance Monitoring Responsibility	Monitoring Cost
PRE-CONSTRUCTION PHASE						
Specific provision in tender documents on archeological/cultural relics	Pipeline trenches, civil works excavations	Verify draft and final documents	Twice – draft and final documents	Design consultants	LWUA PMU	Part of project management in detailed design (minimal cost)
MOA with IPs approved by NCIP and Coordination with PAMB	Notongon and Matiboggo Spring area and Sitio Ilian	Verify draft and final documents	Twice – draft and final documents	MKWD, Design consultants	LWUA PMU	Part of project management in detailed design (minimal cost)
Consultation meetings with the community	Pipelines routes, deep wells, spring, development, and pumping stations	Verify meetings documentation	After completion of meetings	MKWD, Design consultants	LWUA PMU	Part of project management in detailed design (minimal cost)
Land use conversion approval from DAR	Bulacan groundwater source	Verify LUC permit/certificate	Once – before construction works	MKWD, Design consultants	LWUA PMU	Part of project management in detailed design (minimal cost)
Specific provisions in tender documents on nuisance & concerns from the public	Pipelines routes, deep wells, spring, development, and pumping stations	Verify draft and final documents	Twice – draft and final documents	MKWD, Design consultants	LWUA PMU	Part of project management in detailed design (minimal cost)
CONSTRUCTION PHASE						
Total area to be exposed; runoff flowing into disturbed sites	Pipelines routes, deep wells, spring, development, and pumping stations	Visual inspection of sites; plans verification	Daily during rainy periods	Contractor	Construction supervision consultants, MKWD PIU	Part of consultant's construction supervision contract; minimal cost to MKWD PIU

Aspects / Parameters to be monitored	Location	Means of Monitoring	Frequency	Implementation Responsibility	Compliance Monitoring Responsibility	Monitoring Cost
Water supply interruptions	Pipelines routes	Work schedules verification	Daily	Contractor	Construction supervision consultants, MKWD PIU	Part of consultant's construction supervision contract; minimal cost to MKWD PIU
Materials and solid wastes dumped in water bodies	Pipelines routes, deep wells, spring, development, and pumping stations	Visual inspection of sites	Daily	Contractor	Construction supervision consultants, MKWD PIU	Part of consultant's construction supervision contract; minimal cost to MKWD PIU
Noise levels to comply with IFC-EHS noise guideline values.	Pipelines routes, deep wells, spring, development, and pumping stations	Use of sound level meter	Daily	Contractor	Construction supervision consultants, MKWD PIU	Part of consultant's construction supervision contract; minimal cost to MKWD PIU
Dust, cover of stockpiles, smoke belching vehicle and equipment	Pipelines routes, deep wells, spring, development, and pumping stations	Visual inspection of sites	Daily	Contractor	Construction supervision consultants, MKWD PIU	Part of consultant's construction supervision contract; minimal cost to MKWD PIU
Road closure and traffic rerouting; materials stockpiles; road restoration	Pipelines routes	Traffic plans verification	Weekly	Contractor	Construction supervision consultants, MKWD PIU	Part of consultant's construction supervision contract; minimal cost to MKWD PIU
Sanitary toilets, garbage bins, runoff controls	Workers camps	Visual inspection of camps	Once before start of construction and once monthly	Contractor	Construction supervision consultants, MKWD PIU	Part of consultant's construction supervision contract; minimal cost to MKWD PIU
Road safety plan; sign, barricades and night lamps	Pipelines routes, deep wells, spring, development, and pumping stations	Visual inspection of sites	Daily	Contractor	Construction supervision consultants, MKWD PIU	Part of consultant's construction supervision contract; minimal cost to MKWD PIU
Construction wastes	Pipelines routes, deep wells, spring, development, and pumping stations	Visual inspection of sites	Once before final stage of demobilization	Contractor	Construction supervision consultants, MKWD PIU	Part of consultant's construction supervision contract; minimal cost to MKWD PIU
Poaching and illegal trading reports	Notongon and Matiboggo Spring area, and Sitio Ilian	Coordination with LGUs	n/a	Contractor	MKWD PIU	No cost

Aspects / Parameters to be monitored	Location	Means of Monitoring	Frequency	Implementation Responsibility	Compliance Monitoring Responsibility	Monitoring Cost
Number of local labor employed	Pipelines routes, deep wells, spring, development, and pumping stations	Verification of contractor's records	Once a month	Contractor	MKWD PIU	No cost
OPERATION PHASE						
E. Coli bacteria; PNSDW physical & chemical parameters	Pipelines, and pumping stations	Water sampling and laboratory test	Monthly for bacteria; annual for physical & chemical	MKWD	LWUA	Part of MKWD's operation cost
Septic tank of water consumers	Subproject water supply service area	Visual inspection of sites	Once a year	Water consumer	LGU	Minimal cost
Groundwater levels	Wells and springs	Use of groundwater level meter	Once a month	MKWD	LWUA	Minimal cost
Gas chlorine usage	Pumping stations and treatment facilities	Verification of operation records	Once a year	MKWD	LWUA	Minimal cost

Project Performance Monitoring. Project performance monitoring presents the desired outcomes as measurable events by providing parameters or aspects that can be monitored and verified (**Table 7-3**). For preconstruction phase, the EMP requirements need to be incorporated in construction contracts to achieve an environmentally responsible procurement as a desired outcome. Construction phase desired outcomes include effective management of environmental impacts and reduce risk to public. For the operation phase, MKWD's water supply system must meet the drinking water standards (2017 PNSDW) for physical, chemical, and bacteriological parameters.

Table 7-3: Project Performance Monitoring

Desired Outcomes	Aspects / Parameters to be monitored	Means of Monitoring	Frequency	Implementation	Compliance Monitoring	Monitoring Cost
PRE-CONSTRUCTION PHASE						
Environmentally responsive detailed design	EMP requirements incorporated in detailed design	Verify detailed design documents; EMP requirements reflected in tender documents	Twice – (i) draft detailed design documents and (ii) prior to approval of final documents	MKWD, Design consultants	LWUA PMU	Minimal cost
Environmentally responsible procurement	EMP requirements incorporated in construction contracts	Verify construction contract documents	Prior to finalization of construction contract documents	MKWD PIU	LWUA PMU	Minimal cost
CONSTRUCTION PHASE						
Effective management of environmental	Number of public complaints on	Verification of contractor's records; MKWD's	Once a month	Contractor	Construction supervision consultants, MKWD PIU	Part of consultant's construction supervision

Desired Outcomes	Aspects / Parameters to be monitored	Means of Monitoring	Frequency	Implementation	Compliance Monitoring	Monitoring Cost
impacts during construction	construction activities	coordination with local officials				contract; minimal cost to MKWD PIU
Reduce risk to public during construction	Number of accidents involving construction activities	Verification of contractor's records; MKWD coordination with local officials	Once a month	Contractor	Construction supervision consultants, MKWD PIU	Part of consultant's construction supervision contract; minimal cost to MKWD PIU
OPERATION PHASE						
Conformance of Water quality to drinking water standards	Required drinking water quality parameters (bacteria count, color, pH, turbidity, dissolved solids, hardness, alkalinity, manganese, iron, fluoride, chloride, sulfates, magnesium, calcium, carbonates, and bicarbonates)	Water sampling and laboratory test	Monthly for bacteria; annual for physical & chemical	MKWD	LWUA	Part of MKWD's operation cost

C. Implementation Arrangement

This subsection presents the: (i) institutional set-up, (ii) implementation schedule, (iii) required clearances and permits, and (iv) capability building

Institutional Setup. For this subproject, LWUA will serve as the executing agency, while MKWD will be the implementing agency. LWUA has overall responsibility for project coordination, implementation, and liaison with ADB and other government offices. A Project Management Unit (PMU) to be created by LWUA will be responsible for coordinating the implementation at the national level. A PMU staff shall be designated as the Environment Officer for the project. Before the commencement of the subproject, a team of consultants will assist LWUA's PMU and MKWD to ensure smooth implementation and secure required documents. MKWD will be responsible for the procurement of goods, works, and services. During construction and operation phase of the subproject, MKWD will oversee the implementation of the subproject. MKWD shall create a Project Implementation Unit (PIU) for the day-to-day management of the project and will work closely with LWUA's PMU. WDGRC will handle the grievance redress mechanism and promptly address the public's complaints about environmental performance of the subproject.

ADB will assess status of EMP implementation and over-all environmental performance of the Project by reviewing environmental monitoring reports submitted by LWUA and conducting site visits to validate conditions onsite. Corrective actions will be agreed with LWUA, MCWD and the contractor to address deficiencies in EMP implementation or inadequacy of mitigation

measures. ADB will disclose on its web site semi-annual environmental monitoring reports submitted by LWUA.

Environmental Corrective Action Plan. Should the mitigation measures indicated in the CEMP and EMP are observed to be inadequate during subproject implementation, the construction supervision consultants and PIU shall propose a corrective action plan to address this inadequacy and ensure compliance.

Environmental Monitoring Reports. During the construction period, the contractor shall submit to the PIU a monthly environmental self-monitoring report to be submitted to PIU, construction supervision consultants, and PMU. The PIU together with the construction supervision consultants, shall also conduct at least monthly site inspection to monitor EMP implementation and validate the contractor’s environmental monitoring reports. Monthly reports of these monitoring activities shall be submitted to MKWD and the PMU. The PMU shall collate all the monthly data and prepare semi-annual environmental monitoring reports (SEMR) which shall be submitted by LWUA to ADB. SEMRs are due on 31 July for the first semestral report and on 31 January of the following year for the second semestral report. ADB will publicly disclose the SEMRs on its web site.

Implementation Schedule. The MKWD subproject is scheduled to start in the third quarter of 2020 and to be completed in May 2022. MKWD shall ensure that construction contract provisions related to the EMP shall be included in the tendering stage.

Clearances and Permits. Under Philippine regulations, MKWD shall apply for an Environmental Compliance Certificate (ECC) from the EMB Region XII for the proposed augmentation of the existing water supply system and Water Permit from the NWRB. Securing the ECC from EMB Region XII will cost PhP 5,055.00 while applying for Water Permit from NWRB will cost PhP 7,200.00. Both permits will be secured prior to implementation of the subproject. Tree cutting permits will be secured from EMB Region XII by the contractor, if trees have to be cut.

The MKWD is currently on the process of completing all the documentary requirements for the acquisition of the ECC for both Notongon Spring Source Development and Matiboggo Spring Source Development. Online ECC application is not yet initiated. On the other hand, water permit for the Notongon spring and three (3) deep wells were already applied and awaiting the permits from NWRB while water permit for the additional Matiboggo spring will be applied.

Capability Building. Capacity building activities for LWUA, the project management unit (PMU) and MKWD on ADB processes such as environmental and social safeguards, gender mainstreaming, procurement, disbursement and financial management will be provided under the WDDSP. Other trainings necessary for an efficient implementation of the subproject will be identified and added in the future.

Environmental Cost. The indicative overall cost for the implementation of the EMP is shown in **Table 7-4**.

Table 7-4: Cost for EMP Implementation

Component	Description	Number/ Frequency	Cost per Unit (PhP)	Cost (PhP)	Source of Funds
PRE-CONSTRUCTION PHASE					
Clearances and permits	Securing ECC from EMB-RO	2 ECC	5,055/ ECC	10,110 for ECC	MKWD expense

Component	Description	Number/ Frequency	Cost per Unit (PhP)	Cost (PhP)	Source of Funds
	Water Permit from NWRB	5 Water Permits	7,200/ Water permit	36,000 for the Water Permits	MKWD expense
	Land Use Conversion Permit from DAR-RO	1 LUC Permit	1,000 for Filing 10,000 for Inspection	11,000 for LUC Permit	MKWD expense
Public consultations and information disclosure	Information disclosure and consultations during preconstruction and construction phase, including public awareness campaign through media	As per requirement	Lump sum	100,000 for NCIP/FPIC Consultation and Public Hearing and Consultation Activities in Kidapawan City, Makilala, Magpet and Matalam	MKWD expense
Capacity building	(i) Orientation workshop MKWD officials and staff involved in the project implementation on ADB SPS (2009), applicable laws, rules and regulations on environment;	One	Lump sum	720,000 for the 12 WDs included under the WDDSP	Part of the loan package
Baseline receiving water quality monitoring	Water quality characterization of receiving water body	To be determined	Contractor's liability (approx. 20,000/set of samples)	Depends on the number of designated sampling stations	Covered under construction contract (CEMP)
Baseline air quality and noise level monitoring	Assessment of air quality and noise level along receptors	To be determined	Contractor's liability (approx. 30,000/sampling station)	Depends on the number of designated sampling stations	Covered under construction contract (CEMP)
Baseline aquatic biota survey	Characterization of aquatic ecosystem in Notongon River	Two stations (upstream and downstream)	Contractor's liability	approx. 100,000/sampling activity	Covered under construction contract (CEMP)
CONSTRUCTION PHASE					
Noise and dust suppression at work sites	Application of noise and dust suppression measures	As required	Contractor's liability	Not applicable	Covered under construction contract
Traffic management	Safety signboards, temporary diversions, barricades, etc.	Wherever required throughout the project corridor	Contractor's liability	Not applicable	Covered under construction contract

Component	Description	Number/ Frequency	Cost per Unit (PhP)	Cost (PhP)	Source of Funds
Noise level monitoring	Compliance with the IFC-EHS Guidelines	Everyday along nearest receptors	Contractor's liability	Not applicable	Covered under construction contract
Hazard to workers	Implementation of occupational health and safety measures	Throughout the construction period	Contractor's liability	300,000 annually	Covered under construction contract
Any unanticipated impact due to project implementation	Mitigation of any unanticipated impact arising and defect liability period	Lump sum	Contractor's liability	As per insurance requirement	Covered under construction cost – contractor's insurance
OPERATION PHASE					
Water quality	Monthly sampling of water going into the transmission line and randomly from a tap source	370 Stations Tested Monthly	135 per water sample	596,700 annually for water quality sampling	MKWD operating expense

8 GRIEVANCE REDRESS MECHANISM

A common grievance redress mechanism (GRM) will be established at the MKWD to receive, evaluate, and facilitate the resolution of affected persons (APs) concerns, complaints, and grievances about the social and environmental performance related to the various subprojects. The GRM will aim to provide a time-bound and transparent mechanism to voice and resolve social and environmental concerns linked to the subproject. This mechanism shall be disclosed in public consultations during detailed design and in meetings during the construction phase.

The management team were of the need to be able to respond to issues in a timely manner and will separate project related grievances from ongoing supply issues for reporting to ADB and LWUA.

A member of the MKWD Team will be appointed to be the focal point for GRM management and will liaise and inform Barangay administration of procedures in case of any issues.

A member of the IP CADT-holder shall be represented in the GRM who would also act as barangay or municipal representative during the procedural deliberation of issues especially involving IP matters.

The Project's grievance redress mechanism shall in no way impede access to the formal legal system or the courts. The decision of the courts is for finality of case resolution. Below are the steps to be followed in filing grievances and the procedures for redress.

Step 1: The complainant provides the background and files the grievance/complaint verbally or in writing to the MKWD. If unwritten, the Secretary in the MKWD Office will record it in the MKWD complaints system noting it as a project grievance. The focal point for MKWD will respond to the complainant within 3 days to assess whether the issue is project related and aim to resolve the issue and record it within the project grievance register.

Step 2: If no resolution or understanding is reached, the complainant files the grievance/complaint to the PMU within LWUA for it to be resolved within 15 days after filing. The written complaint shall be reproduced in four copies; the original to EA-PMU, two for WD-PIU, and one for the file of the complainant.

Step 3: The Lupon ng Kapayapaan ng barangay (justice system members) whenever possible to resolve the issue at the barangay level. The barangay process may take 15 days or more, including submission of complaint, recording, hearing and resolution.

Step 4: Again, if no resolution or understanding is reached and if the grievance/complaint qualifies for hearing at the Municipal Trial Court (MTC) or Regional Trial Court (RTC), the household may request for assistance of the pro bono lawyer from the Public Attorney's office, through the WDRC. The pro bono lawyer shall assist the household in reproducing the formal complaint in five copies to be distributed as follows: the original to the appropriate court, one each for PMU, PIU, WDRC and for the file of the complainant.

Step 5: The MTC or RTC assesses the merit of the grievance/complaint, schedules the hearing and renders a decision. Appeals can be elevated to the high court. The Supreme Court's decision is final and executory.

Aggrieved parties may also inform the Office of Special Project Facilitators (OSPF) of the ADB of any project-related grievances. APs will be exempted from all administrative and legal fees.

Unresolved grievance can be elevated to the proper courts. The MKWD will maintain a full record of all complaints and grievances received, and the actions taken. MKWD will also ensure grievances are recorded and reported in the Integrated Environmental and Social Safeguards reports that are submitted to ADB every 6 months during project implementation.

Costs. All costs involved in resolving the complaints (meetings, consultations, communication, and information dissemination) will be borne by MKWD.

Complaints to the Department of Environment and Natural Resources. Complaints about environmental performance of projects issued an Environmental Certificate of Compliance (ECC) can also be brought to the attention of DENR-EMB. The process of handling such complaints is described in the Revised Procedural Manual (2007) for the IRR of PD 1586. The steps that DENR-EMB may follow in handling complaints are: (i) DENR-EMB shall verify if the complaint is actionable under PD.1586, (ii) within 72 hours from receipt of a complaint DENR-EMB will send the proponent a Notice of Alleged Violation (NAV) and requests for an official reply as to why the proponent should not be penalized, (iii) DENR-EMB may conduct field validation, site inspection and verification or other activities to assess or validate the complaint. The proponent is allowed to respond within seven days. Proponent's failure to respond to the NAV and further notices will force DENR-EMB to take legal actions. DENR may issue a Cease and Desist Order (CDO) to project proponents which shall be effective immediately based on: (i) violations under the PEISS, and (ii) situations that present grave or irreparable damage to the environment. PD 1586 also allows DENR to suspend or cancel the proponent's ECC if the terms and conditions have been violated.

9 CONCLUSION AND RECOMMENDATIONS

MKWD's water supply subproject will benefit the general public by contributing to the long-term improvement in the water supply system of the project coverage area and providing safe drinking water to residents and commercial establishments in the municipality. The potential adverse environmental impacts are primarily associated with the construction period, which can be minimized through mitigating measures and environmentally sound engineering and construction practices.

Under the Philippine law, since the subproject is categorized under Category B, securing of ECC may be carried out through online application (which may still be subject to the EMB regional office). It is also environment category B under ADB SPS requiring the preparation of this IEE Report.

The MKWD is currently on the process of completing all the documentary requirements for the acquisition of the ECC for both Notongon Spring Source Development and Matiboggo Spring Source Development. Online ECC application is not yet initiated. On the other hand, water permit for the Notongon spring and three (3) deep wells were already applied and awaiting the permits from NWRB while water permit for the additional Matiboggo spring will be applied.

With the implementation of the mitigation measures as proposed in the EMP, the subproject is not expected to cause irreversible adverse environment impacts. Also, the water supply subproject can be implemented in an environmentally acceptable manner without the need for further environmental assessment study, except for the conduct of a public consultations for compliance and further input. Should there be any significant change in the project scope, an updated or a new IEE will be prepared.

The proposed MKWD subproject is hereby recommended for implementation with the following requirements to be strictly followed: (i) Tendering process shall ensure environmentally responsible procurement by requiring the inclusion of EMP provisions in the bidding and construction contract documents; (ii) Contractor's submittal of a CEMP which shall be included in the construction contract; (iii) Contract provisions on creation and operation of the WDGRC shall be included in construction contracts; (iv) LWUA, with its regulatory function, shall ensure that capability building for MKWD shall be pursued; and (v) MKWD shall continue the process of public consultation and information disclosure during detailed design and construction phases.

10 REFERENCES

Asian Development Bank. (March 2014). *Philippines: Water District Development Sector Project*. Local Water Utilities Administration, of the Asian Development Bank.

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ANNEX 1 ACCOMPLISHED REA

WATER SUPPLY
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Rapid Environmental Assessment (REA) Checklist

Instructions:

(i) The project team completes this checklist to support the environmental classification of a project. It is to be attached to the environmental categorization form and submitted to the Environment and Safeguards Division (SDES) for endorsement by the Director, SDES and for approval by the Chief Compliance Officer.

(ii) This checklist focuses on environmental issues and concerns. To ensure that social dimensions are adequately considered, refer also to ADB's (a) checklists on involuntary resettlement and Indigenous Peoples; (b) poverty reduction handbook; (c) staff guide to consultation and participation; and (d) gender checklists.

(iii) Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures.

Country/Project Title: Water District Development Sector Project
Improvement of Water Supply System of Metro Kidapawan Water District

Sector Division:

Screening Questions	Yes	No	Remarks
A. Project Siting Is the project area...			
▪ Densely populated?		✓	
▪ Heavy with development activities?		✓	
▪ Adjacent to or within any environmentally sensitive areas?			
• Cultural heritage site		✓	
• Protected Area	✓		Coordination with PAMB
• Wetland		✓	
• Mangrove		✓	
• Estuarine		✓	
• Buffer zone of protected area	✓		Coordination with PAMB
• Special area for protecting biodiversity	✓		Coordination with BMB
• Bay		✓	
B. Potential Environmental Impacts Will the Project cause...			

WATER SUPPLY
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Screening Questions	Yes	No	Remarks
▪ pollution of raw water supply from upstream wastewater discharge from communities, industries, agriculture, and soil erosion runoff?		✓	
▪ impairment of historical/cultural monuments/areas and loss/damage to these sites?		✓	
▪ hazard of land subsidence caused by excessive ground water pumping?	✓	✓	Follow design limits
▪ social conflicts arising from displacement of communities ?	✓		MOA with NCIP
▪ conflicts in abstraction of raw water for water supply with other beneficial water uses for surface and ground waters?		✓	
▪ unsatisfactory raw water supply (e.g. excessive pathogens or mineral constituents)?	✓		Provision for treatment plant facility
▪ delivery of unsafe water to distribution system?	✓		Proper installation of TL/ML/DL
▪ inadequate protection of intake works or wells, leading to pollution of water supply?	✓		Ensure integrity of structure/design
▪ over pumping of ground water, leading to salinization and ground subsidence?		✓	
▪ excessive algal growth in storage reservoir?		✓	
▪ increase in production of sewage beyond capabilities of community facilities?		✓	
▪ inadequate disposal of sludge from water treatment plants?		✓	
▪ inadequate buffer zone around pumping and treatment plants to alleviate noise and other possible nuisances and protect facilities?		✓	
▪ impairments associated with transmission lines and access roads?		✓	
▪ health hazards arising from inadequate design of facilities for receiving, storing, and handling of chlorine and other hazardous chemicals.	✓		Proper training of personnel on chemical handling and proper wearing of PPE'S
▪ health and safety hazards to workers from handling and management of chlorine used for disinfection, other contaminants, and biological and physical hazards during project construction and operation?	✓		Proper training of personnel on chemical handling and proper wearing of PPE'S
▪ dislocation or involuntary resettlement of people?		✓	
▪ disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable groups?		✓	
▪ noise and dust from construction activities?	✓		Proper wearing of PPE's

WATER SUPPLY
 Page 3 of 4

Screening Questions	Yes	No	Remarks
▪ increased road traffic due to interference of construction activities?		✓	
▪ continuing soil erosion/silt runoff from construction operations?	✓		Construction Methodology
▪ delivery of unsafe water due to poor O&M treatment processes (especially mud accumulations in filters) and inadequate chlorination due to lack of adequate monitoring of chlorine residuals in distribution systems?	✓		Proper operation & maintenance of treatment facility in compliance to water safety plan
▪ delivery of water to distribution system, which is corrosive due to inadequate attention to feeding of corrective chemicals?		✓	
▪ accidental leakage of chlorine gas?	✓		Proper training for handling of chemicals
▪ excessive abstraction of water affecting downstream water users?		✓	
▪ competing uses of water?		✓	
▪ increased sewage flow due to increased water supply		✓	
▪ increased volume of sullage (wastewater from cooking and washing) and sludge from wastewater treatment plant		✓	
▪ large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?		✓	
▪ social conflicts if workers from other regions or countries are hired?		✓	
▪ risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during operation and construction?	✓		Dissemination of awareness regarding construction activities
▪ community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning?	✓		Dissemination of awareness regarding construction activities

WATER SUPPLY
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A Checklist for Preliminary Climate Risk Screening

Country/Project Title: LOAN 3389/GRANT 0477-PHI:
 WATER DISTRICT DEVELOPMENT SECTOR PROJECT (WDDSP)
 Improvement of Water Supply System of Metro Kidapawan Water District
Sector:
Subsector:
Division/Department:

Screening Questions		Score	Remarks ¹
Location and Design of project	Is siting and/or routing of the project (or its components) likely to be affected by climate conditions including extreme weather related events such as floods, droughts, storms, landslides?	1	Proper implementation of project in accordance with set standards
	Would the project design (e.g. the clearance for bridges) need to consider any hydro-meteorological parameters (e.g., sea-level, peak river flow, reliable water level, peak wind speed etc)?	0	
Materials and Maintenance	Would weather, current and likely future climate conditions (e.g. prevailing humidity level, temperature contrast between hot summer days and cold winter days, exposure to wind and humidity hydro-meteorological parameters likely affect the selection of project inputs over the life of project outputs (e.g. construction material)?	0	Proper operation and maintenance monitoring
	Would weather, current and likely future climate conditions, and related extreme events likely affect the maintenance (scheduling and cost) of project output(s)?	1	
Performance of project outputs	Would weather/climate conditions, and related extreme events likely affect the performance (e.g. annual power production) of project output(s) (e.g. hydro-power generation facilities) throughout their design life time?	1	Monitoring of structures and equipment

Options for answers and corresponding score are provided below:

Response	Score
Not Likely	0
Likely	1
Very Likely	2

Responses when added that provide a score of 0 will be considered low risk project. If adding all responses will result to a score of 1-4 and that no score of 2 was given to any single response, the project will be assigned a medium risk category. A total score of 5 or more (which include providing a score of 1 in all responses) or a 2 in any single response, will be categorized as high risk project.

Result of Initial Screening (Low, Medium, High): **MEDIUM**

Other Comments: _____



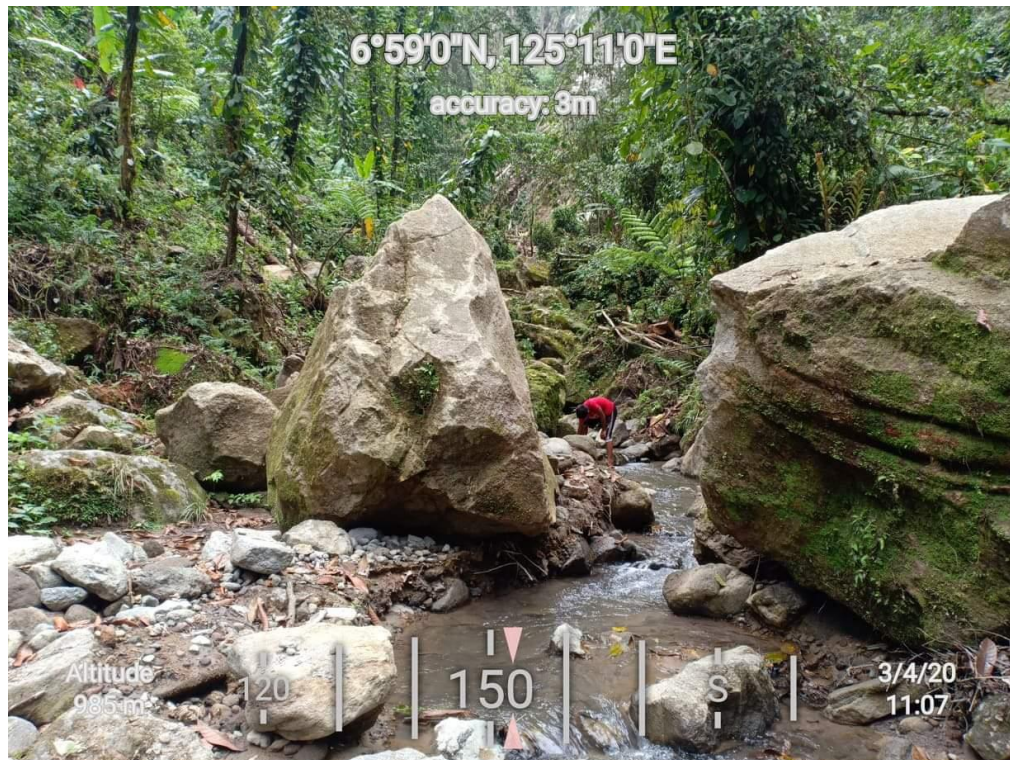
Prepared by: (SGD) ENGR. CANUTO A. CODILLA JR.
Designation/Agency: DIVISION MANAGER A-PLANNING & DESING DIVISION/ MKWD
Date: February 26, 2020
Contact Number: 09097566021

¹ If possible, provide details on the sensitivity of project components to climate conditions, such as how climate parameters are considered in design standards for infrastructure components, how changes in key climate parameters and sea level might affect the siting/routing of project, the selection of construction material and/or scheduling, performances and/or the maintenance cost/scheduling of project outputs.

ANNEX 2 PHOTOGRAPH OF THE SUBPROJECT SITE

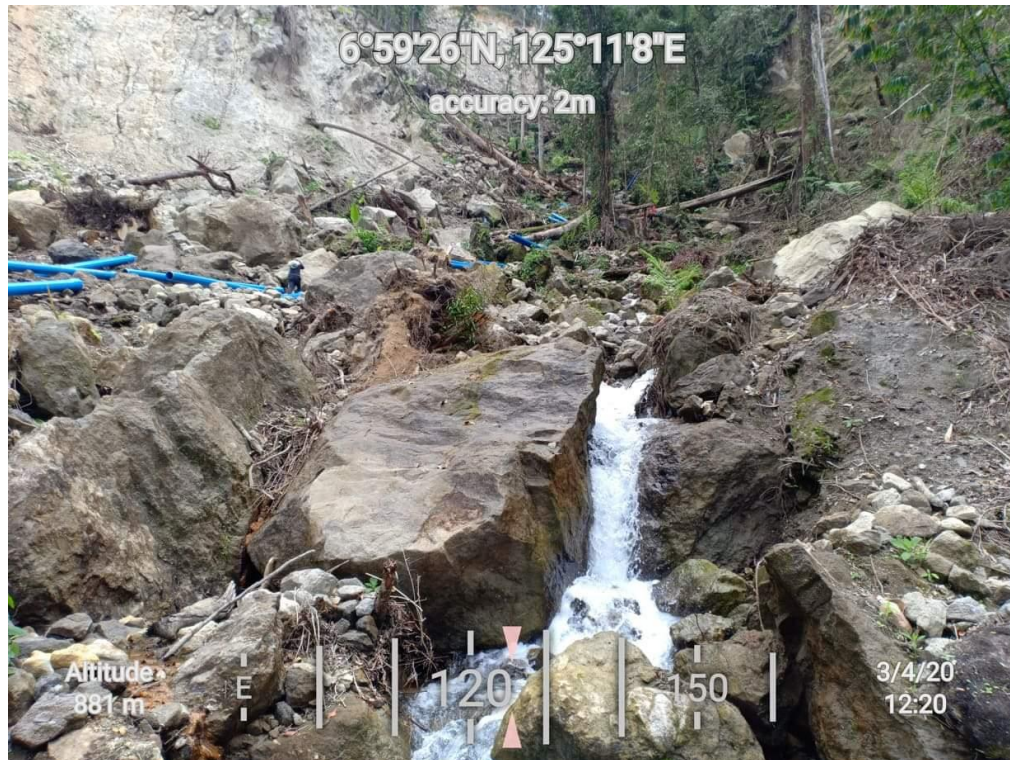
1. Source Development Projects

a. Notongon Spring Source Development



Sitio Settlement, Brgy. Buhay, Makilala

b. Ilian Main Box



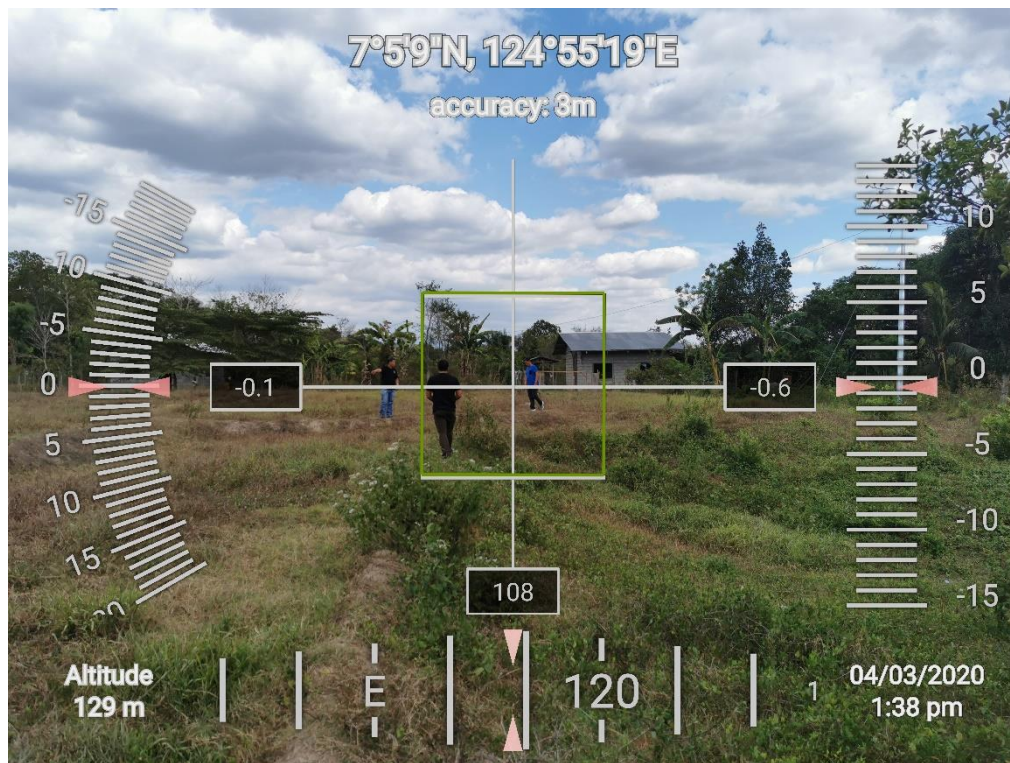
Sitio Ilian, Brgy. Buhay, Makilala

c. Balabag Main Box



Sitio Mawig, Brgy. Balabag, Kidapawan City

d. Manubuan Groundwater Source Development



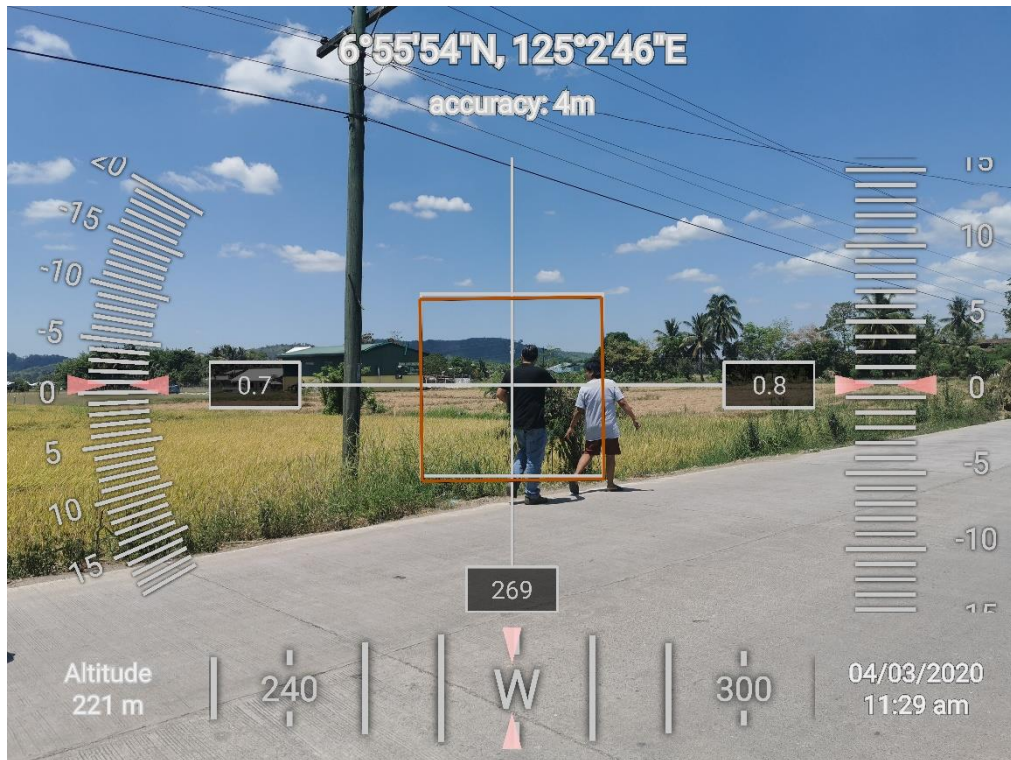
Brgy. Manubuan, Kidapawan City

e. Kalaisan Groundwater Source Development



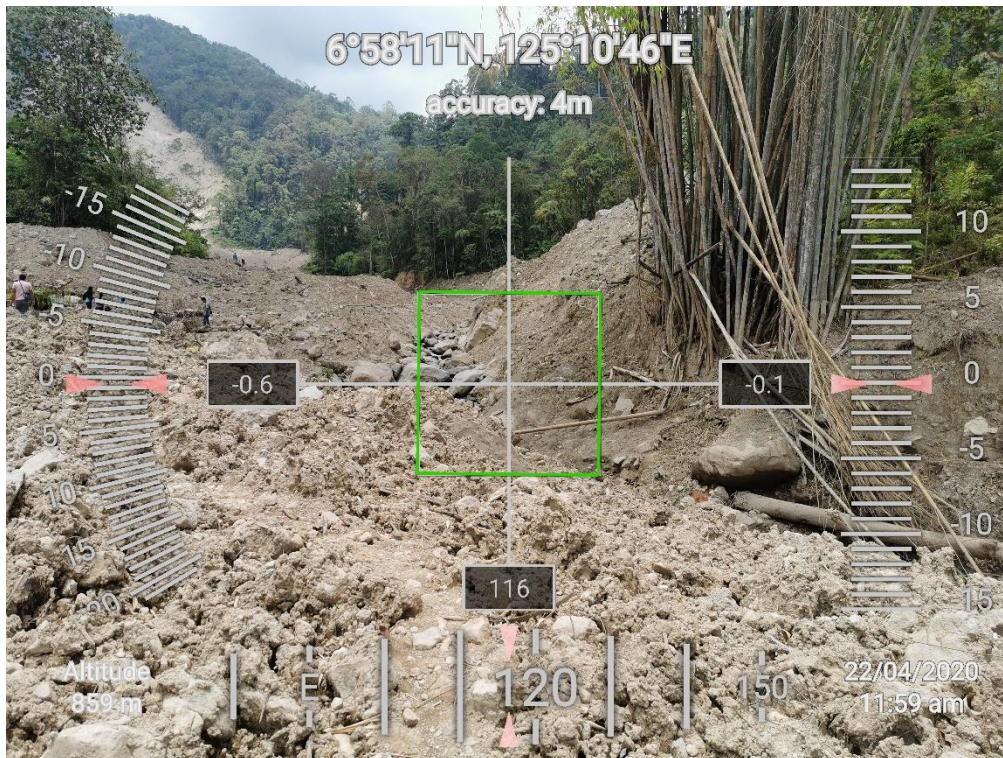
Brgy. Kalaisan, Kidapawan City

f. Bulacanon Groundwater Source Development



Brgy. Bulacanon, Makilala

g. Matiboggo Source Development



Brgy. Buenavida, Makilala

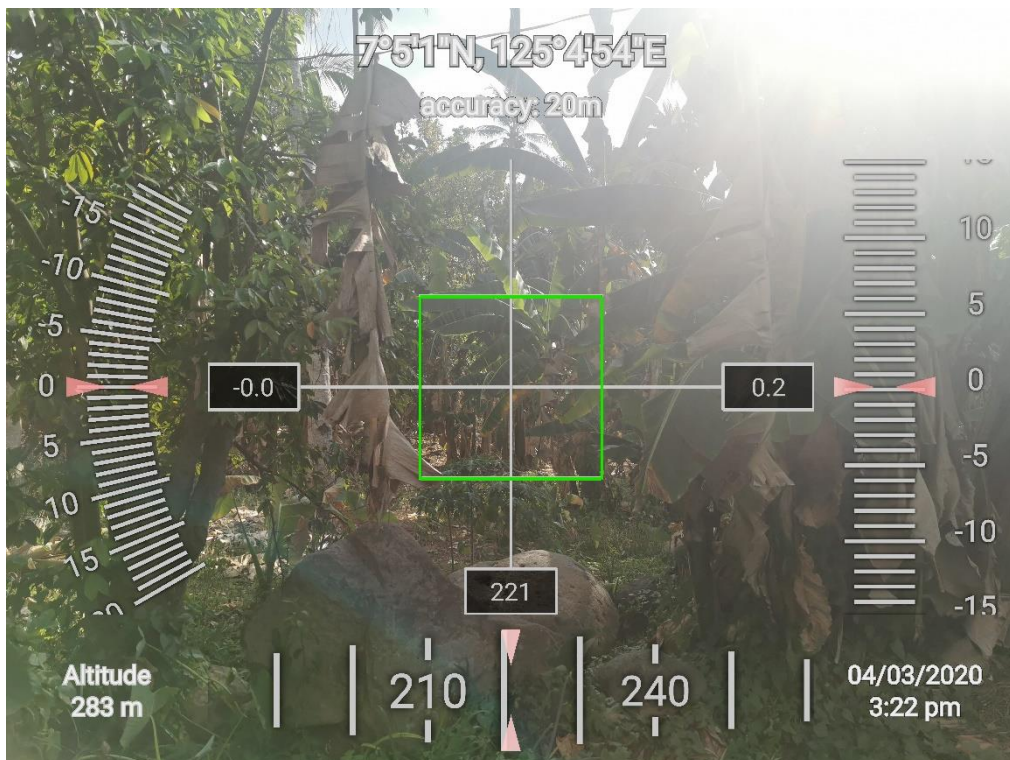
2. Facilities

- a. Perez Water Impounding Structure and LTPF Phase 3
(Proposed Location Owned by MKWD)



MKWD Lapaan Treatment Plant Facility, Brgy. Perez, Kidapawan City

b. Marbel Water Impounding Structure



Brgy. Marbel, Kidapawan City

c. Notongon Treatment Plant Facility and Buhay Water Impounding Structure



Sitio Settlement, Brgy. Buhay, Makilala

d. Water Meter Calibration Facility (Proposed Location Owned by MKWD)



Manongol Reservoir Compound, Brgy. Manongol, Kidapawan City

e. Taluntalunan Water Impounding Structure



Purok 4, Brgy. Taluntalunan, Makilala

f. System Booster Pumps (Proposed Location Owned by MKWD)



Magsaysay Reservoir Compound, Brgy. Magsaysay, Kidapawan City

g. Magpet Water Impounding Facility



Brgy. Tagbac, Magpet

ANNEX 3

SAMPLE CONTRACTOR'S ENVIRONMENTAL MONITORING PLAN (CEMP) OUTLINE

I. Brief Project and Contract Package/Lot Description

Note: include construction activities and map/s

II. Brief Description and Purpose of Contractor's Environmental Management Plan (CEMP)

Note: include applicable laws

III. Associated Project/Lot Facilities and Sensitive Receptors – description and location

Note: include photos

- a) Construction and Workers' Camps
- b) Material Sources and Storage Areas – quarries, borrow pits, water
- c) Workshop and Fabrication Yards
- d) Hazardous Materials and Chemical Storage Areas – fuel, oil, bitumen, chemical additives
- e) Wastes and Spoils Disposal Areas – construction wastes, domestic wastes, hazardous waste
- f) Crushing and Batching Plants – asphalt and concrete
- g) Bridges and Bypass Roads
- h) Sensitive Receptors – schools, hospitals, religious institutions

IV. Construction Impacts and Mitigation Measures; Institutional Arrangements and Timing for EMP Implementation – refer to the EMP table in the IEE and contract documents as basis and indicate the mitigation measures that will be implemented for the contract package for the following):

- a) Soils and Material – topsoil, soil erosion, reclaimed pavement and spoils, slope stability
- b) Quarry and Borrow Sites – degradation of borrow sites
- c) Water Resources – operation of quarries on river banks, siltation, spills from asphalt plants/trucks, bridge activities
- d) Air, Noise and Vibration – emissions, dust, noise from construction vehicles and equipment, crushing, asphalt and cement mixing plants, construction activities
- e) Waste and Hazardous Materials – solid wastes, hazardous and chemical wastes, sewage
- f) Flora and Fauna
- g) Construction Camps, Storage Depots
- h) Local Roads – traffic management, access, congestion, road safety
- i) Community – safety, disruption, access
- j) Workers' Safety, Health and Sanitation – includes HIV/AIDS STD

V. Environmental Baseline Measurements and Sampling – location of sampling sites, methodology, results (if not available yet, to be included in first SEMR for the lot)

Note: include photos

VI. Environmental Monitoring Program (EMoP) – schedule of inspection, parameters to be checked and methodology, checklist for EMP Compliance Monitoring, inspection monitoring form

VII. Public Consultation, if necessary; Training

VIII. Grievance Redress Mechanism (GRM) (See Annex 3) – detailed procedure for resolving complaints

IX. Annexes

- a) copies of all relevant permits (batching plants, disposal sites, tree-cutting, quarries, ECCs, etc.)
- b) baseline sampling laboratory results (original copies)

Note: The CEMP should be straightforward and concise. It need not be a lengthy document.

ANNEX 4 PUBLIC CONSULTATION PROCEEDINGS

MINUTES OF MEETING

1. First Community Assembly



Republic of the Philippines
METRO KIDAPAWAN WATER DISTRICT
 Lanao, Kidapawan City



ACTIVITY REPORT

Activity: **First Community Assembly**
 Date/Time: **June 13, 2019 @ 9:30AM to 12:20PM**
 Venue: **Sifio Settlement, Barangay Buhay, Makilala, Cotabato**
 Attendees: **(Please see attached Attendance Sheet)**

AGENDA/KEY AREAS	ISSUES DISCUSSED/HIGHLIGHTS	ACTION TAKEN/AGREEMENTS
Background/ Rationale	<ul style="list-style-type: none"> ▪ The OIC Provincial Officer of National Commission on Indigenous Peoples (NCIP), Mr. Joey L. Bogay, MPA, informed the body that this First Community Assembly is in line with the recommendation of the FBI Team to conduct Free Prior and Informed Consent (FPIC) in view of the application of Metro Kidaawan Water District (MKWD) for Certification Precondition regarding the utilization of Notongon Spring Source for Level III Water System Project. On this activity, the NCIP will be doing all the talking while MKWD personnel will just listen. 	<ul style="list-style-type: none"> ✓ Noted by the body.
	<ul style="list-style-type: none"> ▪ Orientation on IPRA and FPIC Process was presented and properly explained by Atty. Ivyrose B. Paz of NCIP. 	<ul style="list-style-type: none"> ✓ Well taken by the members of the community.
	<ul style="list-style-type: none"> ▪ Engr. Leonardo A. Aguanan, Jr. presented to the body the Field Based Investigation (FBI) Report which was conducted last February 19-20, 2019 and that their team recommends for the conduct of FREE PRIOR AND INFORMED CONSENT (FPIC) process under Section 19 of the NCIP AO No. 3, series of 2012 	<ul style="list-style-type: none"> ✓ Well taken by the members of the community.

	<ul style="list-style-type: none"> ▪ Identification and Validation of IP Elders and Leaders 	<ul style="list-style-type: none"> ✓ Barangay Batasan <ul style="list-style-type: none"> • Bienvenido G. Macalos • Rosalina D. Angga • Rodel E. Gerarman • Lodring A. Emban • Jony E. Panggilan • Romeo G. Monoy • Melinda B. Cabaling ✓ Barangay Biangan <ul style="list-style-type: none"> • Mercado E. Padayag • Babylin B. Leo • Rogelio B. Olong • Pacita M. Cabaling • Eliza L. Sotonil • Domingo M. Leo ✓ Barangay Buenavida <ul style="list-style-type: none"> • Jaime M. Odo • Paterno O. Amoy • Merly B. Pulong • David M. Ampí • Joselino M. Ando ✓ Barangay Buhay <ul style="list-style-type: none"> • Rama E. Lopez • Sanchy E. Lopez • Felipe C. Antac • Annaliza B. Ipil • Annaliza Cadinás • Dacumos Sanade • Saligan Imbad • Nono Emboc • Alonzo Landas • Marino Landas • Myrna Linao
	<ul style="list-style-type: none"> ▪ Determination of the Decision-making or consensus-building processes 	<ul style="list-style-type: none"> ✓ The body agreed for the Barangay Buhay CADT.
	<ul style="list-style-type: none"> ▪ Consensus on the involvement of NGOs/CSOs 	<ul style="list-style-type: none"> ✓ The body agreed that there will be no involvement of other NGOs/CSOs. That they will just recognized the National Commission on Indigenous Peoples (NCIP).

	<ul style="list-style-type: none">Mr. Joey L. Bogay, MPA asked the consensus of the body if they are amenable that the Second Assembly will be on June 20, 2019 with the same venue.	<ul style="list-style-type: none">✓ The body agreed on the date and venue including the MKWD personnel.✓ A letter will be prepared by Mr. Bogay to this effect.
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Prepared by:


ROCHELLE O. VILLAROSA
Secretary B

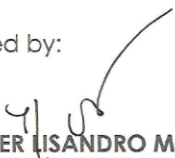
Reviewed by:


NOLI S. BAQUID
Watershed Management Specialist

Noted by:


ROSAURO O. DAGA, MBA
Department Manager A, MD

Attested by:


WILESPER LISANDRO M. ALQUEZA, CE, RMP, MBA
AGM for Operations



Republic of the Philippines
METRO KIDAPAWAN WATER DISTRICT
 Lanao, Kidapawan City

Tel nos. (064) 577-1533, 577-1865, Fax no. (064) 572-5555
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 Website: www.metrokidapawanwd.gov.ph

"Committed to Service, Development and Self-Reliance"





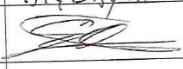




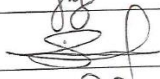
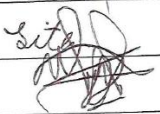

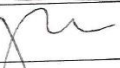
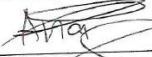
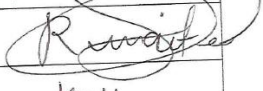

**FIRST COMMUNITY ASSEMBLY IN LINE WITH
 FREE AND PRIOR INFORMATION CONSENT
 (FPIC) PROCESS FOR NOTONGON PROJECT**

Thursday, June 13, 2019, 10:00AM
 Sitio Settlement, Brgy. Buhay, Makilala

ATTENDANCE

NO.	NAME	DESIGNATION	SIGNATURE
1	Bienvenido G. Macaloc	4B's Head Claimant	
2	RODEL E. GERARMAN	ADTC member	
3	Joey Bogay	}	
4	VIROSE B. PAZ		
5	JOYCE MONIQUE J. MONDRAGON		
6	ENGR. LEONARDO A. AGUANAN		
7	MICHELLE MATE CABUG-OS	NCIP	
8	LEONARDO AGUAS		
9	MURNA L. LNAO	IPMR	
10	PELUPE ANTE	ADTC	
11	ROMEL G. UANOX	T C	
12	ROSTURO O. DAGA		
13	RUMIL A. CONDEZ		
14	ELREN S. DAQUIPA		

15	DATU JAME M. ODO		
16	Ernesto Malating		
17	MARINO A LAMAS		LAMAS A/c
18	Allan S. Sandi		Allan
19	Divina Egkil		af
20	Fernando Balimla		FB
21	Analisa Siyo		Siyo
22	Roruel Egkil		Roruel
23	Aleazar Edayan		Edayan
24	BEN Ngaday		BEN
25	Egan Embad		RS
26	Raul Cadenas		Ngaday
27	Elsa Ngaday		Embad
28	Rosita Embad		Bato
29	maylen Bato		Edayan
30	Anita Edayan		Jolito
31	Jolito Lambas		Abahiro
32	Abahiro Jr Tambas		Henry
33	Henry Lambas		Siyo
34	mery Grace Siyo		Ronice
35	Ronice Siyo		Tammy
36	Tammy Lambas		Atong Tkm7
37	otong Sandi		otong Jenelyn
38	Jenelyn Siyo		Jenelyn

39	Jonas d. andayo		ANDAYON
40	Aida d. andayon		ANDAYON
41	Jon d. andayon		ANDAYON
42	No No Embol		
43	asen Landas		ASON
44	Dante Lante		
45	Jonny E Panggilan		
46	Lydia Ondot		Lydia
47	Danny Noa		Danny
48	Jereta Ondot		
49	Mergeta Somadi		
50	Temmy Samadi		
51	Lifa Pandangan		
52	Amalon Sijo		
53	Tommy Lambas		Tommy
54	Crispin Ondot		
55	Elissa Ondot		
56	Felita Duyam		P.P
57	Elita Duyam		ED
58	Analiz Duyam		
59	Rumanti Duyam		
60	Monke Duyam		Joy
61	Lestiy Duyam		
62	Joseph Danyaya		Joe

63	Annabelle Lambas		
64	Marlon Tenorio		an
65	Jerinin Gandaya		tenorio
66	Warkata Sanadi		Jerinin
67	Marcito Ligo		Sanadi
68	Jan marke Ondot		Sanadi
69	Ana Rose Saling		ondot
70	anghelito Bogot		Ana Rose
71	remon Bogot		Bogot.
72	Evelyn Lopez		remon
73	Jinglu Antac		remon
74	BOY BAWAL		remon
75	Jiner BAWAL		- BAWAL
76	Analiza Sanadi		Jiner
77	Leo Saling Antac		Analiza
78	JENNI R. LOPEZ		Leo Jinghit
79	BENJAMIN LINAO		Jiner
80	DAVID AMPI		Jiner
81	JHERICO AMPI		Jiner
82	DACOMAS SANADI		Jiner
83	Rama Lopez		Jiner
84	Jemelga Antac		Jiner
85	Melesa Tenorio		Jemelga
86	Jacelino Ando Jr.		melesa

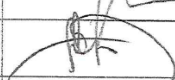
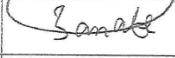



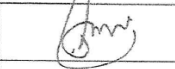
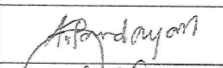

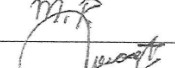


MKWD

Committed to Service, Development and Self-Reliance

1976

87	Merly B. Pulong	A DTC	Merly
88	PATERNO O LAMON		Paterno
89	Annaliza B. EPIC		Annaliza
90	Melinda Cabaling	BTC	Melinda
91	Rosalina D. Angga	ADTE	Rosalina
92	Pacita M. Cabaling	BTC	Pacita
93	Rugbo Olayo	Chairman	Rugbo
94	DOMINGO M LEO	IPMR	Domingo
95	Mercado E Padayag	ROSES	Mercado
96	Sanchy Lopez		Sanchy
97	Lodring Emban	ADTC	Lodring
98	LINA BACOT MARK		Lina
99	Karen Lambak		Karen
100	LINAO LADY DARREN		Linao
101	Juanb Lambak		Juanb
102	Anita Sijo		Anita
103	Mikka Lopez		Mikka
104	Dave Jean Pantanilla		Dave
105	Elna Ogot		Elna
106	ricky Ebbo		ricky
107	Jabber Ondut		Jabber
108	Jolan Antae		Jolan
109	Jomar S-10		Jomar
110	Elmer S-10		Elmer

111	Leen	Eckal		Leen
112	Lina	CRIO		CRIO
113	Jepte	Isaac		Jepte
114	Comelio, Jr. D. Lopez			Comelio
115	John Dave P Lopez			John Dave
116	Lopez, Cornelio E. Sr			Cornelio
117	Dedang Somadi			Dedang
118	Comun Egkil			GUMET
119	Ruel Egkil			Ruel
120	Rommy Egkil			Rommy
121	Boy Egkil			Boy
122	Dodong Antac			Dodong
123	Boy Antac			Antac
124	Bryan Antac			B. Antac
125	Dino Somadi			D. Somadi
126	Junior antac			J.A.
127	Manis Somadi			Manis
128	Eka Landas			Eka Landas
129	Bento Landas			Bento
130	Angelito Landas			Angelito
131	Nestor Auel			Nestor Auel
132	Evelyn Auel			Evelyn
133	Bambam Aue			Bambam
134	Bryan Auel			Bryan

135	WHELLE O. VILLAROSA		
136	ROL S. BAQUID		
137	Ebong Samade		
138	Denilo Samade		Denilo
139	Mamerto Samade		
140	Dacornor Samade Jr.		
141	Renante Samade		
142	Jesus Samade		J.S.
143	Poting Samade		P. Samade
144	Manggean Samde		
145	Eliud Pandayan		E.P.
146	Adelmo Pandayan		
147	Malxin Pandayan		
148	Mintolo Pandayan		
149	alex ogot		
150	Mavin ogot		
151			
152			
153			
154			
155			

2. Second Community Assembly



Republic of the Philippines
METRO KIDAPAWAN WATER DISTRICT
 Lanao, Kidapawan City

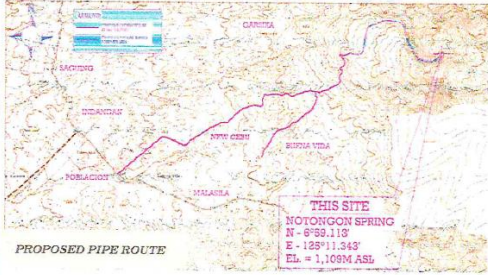
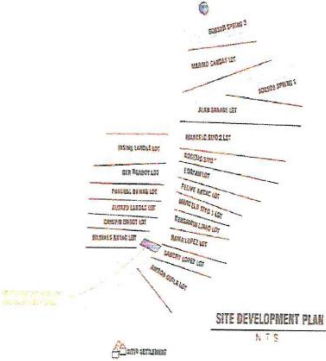


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ACTIVITY REPORT

Activity: **Second Community Assembly**
 Date/Time: **June 20, 2019 @ 9:30AM to 12:35PM**
 Venue: **Sifio Settlement, Barangay Buhay, Makilala, Cotabato**
 Attendees: **(Please see attached Attendance Sheet)**

AGENDA/KEY AREAS	ISSUES DISCUSSED/HIGHLIGHTS	ACTION TAKEN/AGREEMENTS
Project Presentation	<ul style="list-style-type: none"> ▪ Engr. Ramil A. Condez, Department Manager, started the presentation by giving the audience a history on the creation of MKWD. <p><u>Objectives of the project:</u></p> <ul style="list-style-type: none"> ✦ Provide clean and potable water ✦ Protect the source of water ✦ Improve the way of living, health and sanitation <p><u>Project Data:</u></p> <ul style="list-style-type: none"> ✦ Pipeline Data: <ul style="list-style-type: none"> ◆ Approximate total distance: <u>25.0 kilometers</u> ◆ Notongon Spring Source elevation: <u>969 meters</u> ✦ Facilities: <ul style="list-style-type: none"> ◆ Proposed Dam ◆ Treatment Plant ◆ Staff House ✦ Coverage: <ul style="list-style-type: none"> ◆ Makilala ◆ Buhay ◆ Buena Vida ◆ Garsika ◆ New Cebu ◆ Poblacion 	<ul style="list-style-type: none"> ✓ Very well presented

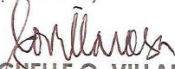
	<p><u>Proposed Project Layouts and Design:</u></p>  <p>PROPOSED PIPE ROUTE</p>  <p>SITE DEVELOPMENT PLAN N.T.S.</p> <p>APPROXIMATE AREA COVERAGE: ✓ 50 HECTARES</p>	
<p>Open Forum</p>	<p>▪ Questions raised during the forum, to wit:</p> <ul style="list-style-type: none"> ✚ Mambiling Andayon: From the proposed dam, how many kilometers will be covered upstream? If his area will be included? 	<p>✓ Engr. Condez informed him that there will be a secondary survey for final validation together with NCIP to determine the exact hectareage and stressed out to them that there will be no fencing to be done but we will just marked the boundaries like bamboo and other trees.</p>

	<ul style="list-style-type: none"> ✓ However, IPMR Linao said that the area of Andayan is not included and far from the initial boundary identified.
<ul style="list-style-type: none"> ✚ Bienvenido Macalos: What would happen to the IPs within the 50 hectares to be covered by the project? To the 17 identified persons? 	<ul style="list-style-type: none"> ✓ Department Manager Daga informed them that the 17 identified settlers will be given job opportunity. However, it will be supported by an endorsement from the Brgy. Buhay CADT Officials.
<ul style="list-style-type: none"> ✚ Melesa Tenorio: Why is it that there is Marcelo Siyo 1 and Marcelo Siyo 2 mentioned in Site Development Plan? 	<ul style="list-style-type: none"> ✓ Mr. Baquid replied that he has two (2) lots in the said area. However, he explained that these names are not yet final. That this is only based on initial survey
<ul style="list-style-type: none"> ✚ Marcelo Siyo: He informed the group that there are seven (7) other settlers after his area. 	<ul style="list-style-type: none"> ✓ NCIP Provincial Officer Joey Bogay informed the body that this should be settled within their Tribal Leaders who can attest who are the real occupants of the said area. ✓ Further, it will not be final unless the exact area will be determined. ✓ Datu Rama E. Lopez explained further that when they called for the conduct of survey, these persons did not attend. Thus, he suggested that they will just conduct a separate meeting for this purpose.

		<ul style="list-style-type: none"> ✓ Datu Romeo Monoy also informed the body that the leaders already recognized the actual occupants per area. ✓ Engr. Condez reminded them that there will be a second survey to finalize the area and its affected settlers.
	<ul style="list-style-type: none"> ✚ Felipe Antac: What are the benefits to be given to occupants where pipes will pass through? 	<ul style="list-style-type: none"> ✓ Engr. Condez informed the body that we will be needing manpower when the project commence. Thus, they will be given priority in terms of hiring job orders for excavation, hauling, backfilling and the likes.
	<ul style="list-style-type: none"> ✚ NCIP Provincial Officer Joey Bogay: He encourages the residents to ask more questions. He said that MKWD is engaged in business. They entered into this negotiation because they wanted to make use of the water found in the domain. Since this is business, there would be profit. So, in behalf of the settlers, he asked if they are entitled of the profit? 	<ul style="list-style-type: none"> ✓ Engr. Condez made it clear saying that MKWD is a Government-Owned and Controlled Corporation (GOCC) as earlier mentioned. That it is run like in a business manner for sustainability. At the end of the year, when there is still an income, we are obliged to make a project out of it. We do not give royalty fees because we are prohibited by the COA to give monetary amount to other agencies. ✓ Engr. Condez said that it will part of the Memorandum of Agreement (MOA) negotiation.

		<ul style="list-style-type: none"> ✓ Sir Bogay also answered that it will be subject for MOA negotiation and the decision must be communal.
	<ul style="list-style-type: none"> ✚ Rogelio Olong: If the project is already operational, are these four (4) barangays be given job opportunities? 	<ul style="list-style-type: none"> ✓ Upon commencement of this project, there are a lot of job opportunities that will be opened and settlers in these areas will be given priority.
Next Activity	<ul style="list-style-type: none"> ✚ NCIP Provincial Officer Joey Bogay asked the body if they could already make a decision on their own to which they affirmatively replied. So, the NCIP will just wait for their letter if they will allow the project to push through or not. If yes, prepare what you want to be included in the MOA. If not, give us reason. 	<ul style="list-style-type: none"> ✓ The Barangay Buhay CADT Officials will inform officially the NCIP of their decision through a letter. ✓ Sir Bogay also reminded the body to prioritize the resolution designating the Barangay Buhay CADT as the decision maker.

Prepared by:


ROCHELLE O. VILLAROSA
 Secretary B

Reviewed by:


NOLL S. BAQUID
 Watershed Management Specialist

Noted by:

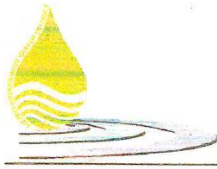

ROSAURO O. DAGA, MBA
 Department Manager A, MD


RAMIL A. CONDEZ
 Department Manager A, EOD

Attested by:


WILESPER LISANDRO M. ALQUEZA, CE, RMP, MBA
 AGM for Operations

JUN 21 2019



Republic of the Philippines
METRO KIDAPAWAN WATER DISTRICT
 Lanao, Kidapawan City

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 Website: www.metrokidapawanwd.gov.ph
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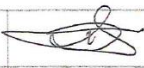








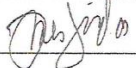



**SECOND COMMUNITY ASSEMBLY IN LINE WITH
 FREE AND PRIOR INFORMATION CONSENT
 (FPIC) PROCESS FOR NOTONGON PROJECT**

Thursday, June 20, 2019, 9:30AM
 Sitio Settlement, Brgy. Buhay, Makilala

ATTENDANCE

NO.	NAME	DESIGNATION	SIGNATURE
1.	ROSAURO O. DAGA	DEPT. MANAGER A	
2.	RIMMIL A. CONDEZ	DEPT. MAN - B	
3.	ELIZEN S. DARVIPA	DEPT. MANAGER A	
4.	ORNUTO A. CODILLA JR.	DIVISION MANAGER	
5.	NOLI S. BASUID	INTERCITED MNGT. SPECIALIST	
6.	ERLANDO FRESCO H. FERPER	DRIVER	
7.	JOEN I. BOCAN MANA	Provincial Officer - NCRP	
8.	ATTY. MYRICE B. PAZ	ATTY / NCRP	
9.	DR. LEONARDO ANTONIO	DR - II / NCRP	
10.	MRS. MARICELLE J. MONTENANO	ATTY / NCRP	
11.	MICHELLE MAE CASAL-OS	ATTY - I / NCRP	
12.	ERIC S. GUERRA	ATA - II	
13.	ROMEO G. MONROY	TRIBAL CHIEFTAIN	
14.	BARCELIN B. LEO	ADTC	

15	Domingo Leo	IPMR	
16	Rogelio Olong	Tribal Chief tin	
17	Mercado Padayag	Head claimant	
18	Liza Sofomil	BTC	
19	Bienvenido G. Macalás	UP's Head Claimant	
20	Jomy E panggilau	ADTC	
21	Emily B. Antac	member	
22	Angelica S Iganon	member	
23	Sheryl Sanadi	member	
24	Dino Sanadi	member	Dino
25	Alonso Landas	BTC	Alonso
26	Mylene Bawag		Mylene
27	Merlynda Pananding		
28	pascual Bawag		P.B
29	Editha Bawag		Editha
30	Agosara Bawag		B.B
31	Lorito Bawag		
32	Ramel Bawag		R.B
33	Ricky Bawag		Ricky
34	Joel Bawag		JM
35	Ben ngaday		Ben
36	Elsa ngaday		Elsa
37	Maylen Bato Egkil		
38	Ason Landas		Ason

39	Alonso o Landas	BTC	Alonso
40	Mylene Bawag		Mylene
41	morino Landas	ADTC	LANDAS M.
42	Dante Landas		Dante
43	Bernard Egkil		Bernard
44	Arnel Encing Landas		encing
45	Gina Landas		Gina
46	Analiza Siyo	ADTC	Siyo
47	Raul Cardinas		Raul
48	Ramuel Bawag		Ramuel
49	Ricky Bawag		Ri B
50	Egan Embad	BTC C	Eg
51	Rosita Embad		Rosita
52	Divina L. Egkil	BTC	Divina
53	Anita Egkil	numbers	Anita
54	Ruel Egkil	BTC	Ruel
55	Marglen Bato	numbers	Marglen
56	Romina Antac		Romina
57	Ruben Antac		Ruben
58	Elvira Landas		Elvira
59	Pharmacia Pandagan		Pharmacia
60	Ani-roce Landas		Ani-roce
61	Arlyn Sanadi		Arlyn
62	Agosara Bawag		Agosara

63	Angelica	Igianon		A.I
64	Billmes	Antac		BA
65	Nenita	Antac		hanita
66	Jenelyn	Antac		Jenelyn
67	Felipe	Antac		Felipe
68	Jengki	Antac		Jengki
69	Lita	Pandayan		Lita
70	Janas	Andayan		Janas
71	Mambiring	Andayan Jr.		Mambiring
72	Jolu	Andayan		JOLU
73	Rogelio	Siyu		Siyu
74	Arnel	Siyu		Arnel
75	SAMADI - OTONG			SAMADI
76	Anabou	Siyu		Anabou
77	Jenelyn	Siyu		Jenelyn
78	Ronie	Siyu		Ronie
79	marcelo	Siyu		marcelo
80	Anabelle	Siyu Lambas		Anabelle
81	Anita	Siyu		Anita
82	marlon	Siyu		marlon
83	Timmy	Lambas		Timmy
84	Timmy	Samadi		Timmy
85	Meryetta	Samadi		Meryetta
86	Lydia	Ondet		Lydia

87	Richy	Eboy		<i>Richy</i>
88	Grace	Siyo		<i>Grace</i>
89	Pilita	Duyan		<i>Pilita</i>
90	Elna	Duyan		<i>Elna</i>
91	Renante	Duyan		<i>Renante</i>
92	Cesly	Duyan		<i>Cesly</i>
93	Analie	Duyan		<i>Analie</i>
94	Marbe Joy	Bualan		<i>Marbe Joy</i>
95	Elsisa	ondot		<i>Elsisa</i>
96	Crispen	ondot		<i>Crispen</i>
97	otong	sanadi		<i>otong</i>
98	Nemon	ogot		<i>Nemon</i>
99	Nonet	ogot		<i>Nonet</i>
100	Mulesa	Tenorio		<i>Mulesa</i>
101	Marlon	Tenorio		<i>Marlon</i>
102	Alizar	EDAYAN		<i>Alizar</i>
103	Arcinio	ngaday		<i>Arcinio</i>
104	Jimmy	Saling		<i>Jimmy</i>
105	Jimboy	Saling		<i>Jimboy</i>
106	Lori Eo	Bawag		<i>Lori Eo</i>
107	Analie	Egkil		<i>Analie</i>
108	Jereta	Ondot		<i>Jereta</i>
109	Daniel	Landas		<i>Daniel</i>
110	Michael	Egkil		<i>Michael</i>

111	Alme G. Landas		JGH
112	Rocel Landas		Jan
113	Remelyn Lambas		Remelyn
114	Karen Lambas		Karen
115	Matabay Lambas		Matabay
116	Marilyn M. Edayan		Marilyn
117	Chayrine Saling		C.S
118	DANBYA JOSEPH		JOSEPH
119	Ronie Siyo		Ronie
120	Ricky ERBOY		ERBOY
121	Mery Grace Siyo		Siyo
122	Jenelyn Siyo		Jenelyn
123	Matabay Lambas		Matabay
124	Elmer Siyo		Elmer
125	otong Sanadi		otong
126	Abahero Lambas		Abahero
127	ZENANTE DUYAN		ZENANTE
128	MARVESOY BUHAN		MARVESOY
129	ELINA OGOT		ELINA
130	Aharae Lambas		A.L
131	Jermin Pandayan		Pandayan
132	Lita S. Pandayan		Lita
133	Romeo Egkil		Romeo
134	Allen Dawa Sanadi		Allen

135	Princess Diana Sanadi		P
136	Maricel Eskil		me
137	Mark Anthony Sanadi		ma
138	Jengki Antac		ja
139	Siman Antac		su
140	Lesly Pandayan		Lesly
141	Archie Pandayan		Archie
142	clent Jhon Antac		cl
143	Princess cloe Capuyan		P. cloe
144	Joel Pandayan		Joel
145	Ruel Mark Eskil		R.E
146	christine Eskil		cb
147	Jesriel Eskil		je
148	Jevhern Eskil		J.E
149	Traves Dray Siyo		Traves Siyo
150	Michael Sanadi		Michael
151	Marjyn Sanadi		ma
152	Norjjana Landas		ni
153	Analisa Cambas		ja
154	Agane Landas		Landas
155	Jonathan - Landas		Landas

3. Third Level for the Free Prior Information Consent (FPIC)



Republic of the Philippines
METRO KIDAPAWAN WATER DISTRICT
 Lanao, Kidapawan City



ISO 9001:2015 Certified
 Cert. No. 66478

ACTIVITY REPORT

Activity: **Third Level for the Free and Prior Information Consent (FPIC)**
 Date/Time: **August 6, 2019 @ 9:00AM to 11:45AM**
 Venue: **Sitio Settlement, Barangay Buhay, Makilala, Cotabato**
 Attendees: **(Please see attached Attendance Sheet)**

AGENDA/KEY AREAS	ISSUES DISCUSSED/HIGHLIGHTS	ACTION TAKEN/AGREEMENTS
Acknowledgement of Participants	<ul style="list-style-type: none"> ▪ Ms. Joyce Monique J. Mondragon from National Commission of Indigenous People acknowledges the presence of the following: <ul style="list-style-type: none"> ✦ CADT Representative Datu Rama Lopez ✦ Barangay IPMR Myrna Linao ✦ Barangay Chieftain Datu Dacumos Sanadi including the Barangay Tribal Council ✦ Women's Sector ✦ Whole IP Community including the Tribal Youth ✦ MKWD employees headed by GM Stella M. Gonzales ✦ NCIP personnel headed by Mr. Joey L. Bogay 	<ul style="list-style-type: none"> ✓ Everyone was acknowledged.
Project Overview	<ul style="list-style-type: none"> ▪ Mr. Joey L. Bogay informed the body that we are in the third phase which is a mandatory process in the Free and Prior Information Consent (FPIC) for the utilization of Notongon Source for Level III Water System. He added that his office received a Community Authorization which authorizes Rama Lopez, Sanchy Lopez, Dacumos Sanadi, Myrna Linao, Felipe Antac, Igang Embad, Alonzo Landas, Romeo Igkil, Marino Landas and Divina Sanadi to negotiate and to sign the Memorandum of Agreement regarding the project with Metro Kidapawan Water District (MKWD). The said document was duly signed by 85 individuals from Barangay Buhay. 	<ul style="list-style-type: none"> ✓ The Community Authorization was being validated by Mr. Bogay to which the body strongly affirmed. Thus, it is called Conditional Consent.

<p>Conditions set by the Indigenous Cultural Community of Barangay Buhay</p>	<ul style="list-style-type: none"> ▪ 1st Condition: Royalty Tax (one centavo per cubic meter) ▪ 2nd Condition: Tribal Office where they could hold their meetings ▪ 3rd Condition: Scholarship (elementary, high school and college) 	<ul style="list-style-type: none"> ✓ GM Gonzales informed the body that she does not oppose this condition. But she is asking time to look for legal basis because Water District is a Government-Owned and Controlled Corporation (GOCC). We see to it that all disbursements must be in accordance with the law. Rest assured it will be recommended to our Board of Directors. ✓ GM Gonzales informed the body that we can only provide Tribal Hall just like in Batasan and Ilian because we have limited funds for this purpose. ✓ The body agreed that MKWD will only provide a Tribal Hall instead of Tribal Office. ✓ GM Gonzales informed the body that nowadays, the tuition fees for elementary and high school is already free especially in public schools. Thus, GM Gonzales suggested to the body that we will have two (2) college students and they will take technical, engineering or forestry course. After finishing their course and passes the Civil Service Exam, the GM made a guarantee that they will be hired by the office. ✓ The body agreed to have two (2) college scholars. ✓ GM Gonzales added that, at present, if they have children who graduated in high school, we could train and hire them as private plumbers. Private plumbers are contractors who will conduct repairs after the water meter and payment of their labor is based on approved tariff. The sharing would be 60 percent for the private plumbers and 40 percent for MKWD.
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	<ul style="list-style-type: none"> ▪ 4th Condition: That the 17 lot owners must be hired as regular employee of the MKWD and said job opportunity could be inherited by the next of kin. ▪ 5th Condition: If there are reforestations to be conducted by the MKWD, manpower to be hired must be from members of the community of Barangay Buhay. ▪ 6th Condition: Barangay Buhay community will be given water facilities. 	<ul style="list-style-type: none"> ✓ GM Gonzales gave an assurance that the 17 lot owners will be hired by the office but stresses out that they must adhere at all times with the Civil Service rules and regulations. If in case that the lot owners reaches the retirement age, that's the time that his son/daughter or next of kin will be hired. Moreover, the GM informed the body that MKWD had a rule that we cannot hire additional employees if we cannot reach certain number of connections. The ratio is 1:250 (1 employee for every 250 connections). Once they committed violations, offenses or administrative cases, they will be sanctioned accordingly. ✓ The body agreed for the hiring of the 17 lot owners as casual employees. ✓ GM Gonzales said that the activity does not only involve reforestations. Construction of dam, treatment facility and reservoir are some of them. So, the 17 lot owners to be hired are already sufficient since reforestation will be part of their job. ✓ Mr. Bogay suggested to the body that this condition will be deleted since it will form part of their duties when hired. Thus, the body are amenable for its removal. ✓ GM Gonzales said that it will be endorsed to the technical team who will evaluate the location and number of beneficiaries. If for rehabilitation, the budget needed must be determined. Thus, the technical team will conduct site evaluation for this purpose.
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	<ul style="list-style-type: none"> ▪ 7th Condition: The Technical Working Group/Core Group must be separated from Ilian and Notongon. ▪ 8th Condition: Road rehabilitation from Barangay Buhay to Settlement. ▪ 9th Condition: Rice subsidy for CAFGU members of Barangay Buhay. 	<ul style="list-style-type: none"> ✓ GM Gonzales acknowledged that there will be separate Technical Working Group and Core Group from Ilian and Notongon. The TWG/Core Group will submit plans and programs. They will also hold meetings with honorarium. ✓ Mr. Bogay suggested for renaming the Technical Working Group. He committed to find a name or terminology that is best suitable for the group. ✓ GM Gonzales made it clear that the mandate of MKWD is water supply only. Road rehabilitation is under the Department of Public Works and Highways (DPWH) and Local Government Unit (LGU). But nonetheless, the GM did not totally decline. Instead, she said that MKWD will support like providing fuel. ✓ Mr. Bogay also seconded that it is not the responsibility of MKWD to rehabilitate a road. But MKWD will support them in other means like if they will borrow heavy equipment from the LGU, MKWD can provide a fuel for the said equipment. ✓ GM Gonzales informed the body that we cannot provide this request because it is forbidden by the law. Even MKWD employees do not have rice allowance. The GM suggested that when they have General Assembly, the MKWD can give support or donation. ✓ Mr. Bogay stressed out to the body that MKWD cannot give them rice subsidy. If the royalty will be pushed through, since the GM Gonzales will still look for legal basis, Mr. Bogay suggested that the rice subsidy shall be taken from it.
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	<ul style="list-style-type: none"> ▪ 10th Condition: Duration of the Contract must be 10 years 	<ul style="list-style-type: none"> ✓ GM Gonzales informed the body that the investment of MKWD for this project is quite sizeable. Thus, the GM is not amenable with the duration of 10 years. However, the GM proposes to conduct re-visit of the agreement like within five (5) years because she believes that there will be changes. ✓ Mr. Bogay said that MKWD is not DOLE who can go with 12 years. He emphasizes that no business entity would push through with 10 years considering the budgetary requirement of this project. He added that, based on IPRA Law, the contract must be twenty five (25) years. Thus, he recommended to the body to change their consent to 25 years. ✓ The body agreed that their consent will be up to 25 years.
Open Forum	<ul style="list-style-type: none"> ▪ In the absence for two (2) college scholars for now, can we ask for support for our high school students? ▪ Can he ask for financial support for his child who is in first year college studying Architecture? 	<ul style="list-style-type: none"> ✓ GM Gonzales answered that this agreement will start after construction period or when it is completely operational. More or less, it would still take two years to become operational. Thus, we could not provide yet. But with regards to the conduct of meetings by the TWG or any appropriate name, it can commence. During construction, hiring of workers may also start. However, the Memorandum of Agreement (MOA) will take effect when the project is fully operational. ✓ GM Gonzales and Mr. Bogay replied that MKWD cannot provide support as of this moment since we are only in the first phase. The project is not yet fully operational. ✓ Mr. Bogay suggested to him to go to NCIP office and apply for a scholarship since they have a program for this purpose. If non-IP, he cannot avail of the program.

	<ul style="list-style-type: none"> ▪ Can he ask for financial support for his child who is in first year college studying Architecture? 	<ul style="list-style-type: none"> ✓ GM Gonzales and Mr. Bogay replied that MKWD cannot provide support as of this moment since we are only in the first phase. The project is not yet fully operational. ✓ Mr. Bogay suggested to him to go to NCIP office and apply for a scholarship since they have a program for this purpose. If non-IP, he cannot avail of the program.
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Prepared by:


ROCHELLE O. VILLAROSA
 Secretary B

Reviewed by:


NOLI S. BAQUID
 Watershed Management Specialist

Noted by:


ROSAURO O. DAGA, MBA
 Department Manager A, MD

Attested by:


WILESPER LISANDRO M. ALQUEZA, CE, RMP, MBA
 AGM for Operations



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 "Committed to Service, Development and Self-Reliance"



THIRD LEVEL FOR FREE AND PRIOR INFORMATION CONSENT (FPIC) PROCESS FOR NOTONGON PROJECT

Tuesday, August 6, 2019, 9:00AM
 Sitio Settlement, Brgy. Buhay, Makilala
ATTENDANCE

NO.	NAME	DESIGNATION	SIGNATURE
1	Joey Bogay	NCIP	
2	Alonso o Landas		
3	Ricky Bawag		
4	Ben ngadby		
5	pascual Bawag		
6	Abzar edagan		
7	Divina Sanadi		
8	Allan Sanadi		
9	Enrigo Landas		
10	Dacumos Sanadi		
11	Felipe Antac		
12	Dante Landas		
13	Ason Landas		
14	Marina Landas		
15	ardot joseph		
16	Billmas Antac		

17) FAIZAL P. Buila

NO.	NAME	DESIGNATION	SIGNATURE
17	Analsu Sigo		
18	Joel Gubat		
19	Fernando Balimba		
20	Jimmer Bawang		
21	Lorito Bawang		L.B
22	Myrna L. Linao		
23	Sancho Lopez		
24	Vergina Fernandez		
25	Rogelio Fernandez		
26	Edmundo Pundaya		
27	Amel Sigo		
28	Marcelo Sigo		
29	Crispin Ondot		
30	Elsisa Ondot		
31	MARINO LANDAS		LANDAS M.
32	ERASMO LANDAS		
33	DANTE LANDAS		
34	BILIBONES ARENAL		
35	ROSAURO O. DAGA		
36	KAMIL A. CONDEZ		
37	ELBEN S. DAQUIPA		
38	WILSON USANDRO M. ALQUEZA		
39	STELLA M. GONZALES		
40	JUNVALD B. ARENAL		

Ben Linao
 MKWD Committed to Service, Development and Self-Reliance 1976

4. Review and Evaluation of Memorandum of Agreement (MOM) for Notongon Spring Source Project



Republic of the Philippines
METRO KIDAPAWAN WATER DISTRICT
 Lanao, Kidapawan City



ACTIVITY REPORT

Activity: **Review and Evaluation of Memorandum of Agreement (MOA) for Notongon Project**
 Date/Time: **September 9, 2019 @ 9:00AM to 12:38PM**
 Venue: **MKWD Mess Hall, Lanao, Kidapawan City**
 Attendees: **(Please see attached Attendance Sheet)**

AGENDA/KEY AREAS	ISSUES DISCUSSED/HIGHLIGHTS	ACTION TAKEN/AGREEMENTS
Recognition of Participants	<ul style="list-style-type: none"> ▪ Ms. Joyce Monique J. Mondragon from National Commission of Indigenous People recognizes the presence of the following: <ul style="list-style-type: none"> ✦ Matanam Felipe Antac ✦ Tribal Chieftain Dacumos Sanade ✦ Matanam Alonzo Landas ✦ Provincial IPMR/IP Claimant from Buenavida Board Member Jaime M. Odo ✦ Mercado Padayag from Brgy. Biangan ✦ Marino Landas from Brgy. Buhay ✦ 4Bs Head Claimant Bienvenido G. Macalos ✦ Head Claimant from Brgy. Buhay Datu Rama Lopez ✦ Brgy. Buhay IPMR Bae Myrna L. Linao ✦ Tribal Secretary from Brgy. Buhay Divina E. Sanadi ✦ MKWD employees headed by GM Stella M. Gonzales ✦ NCIP personnel headed by Provincial Officer Joey L. Bogay, MPA 	<ul style="list-style-type: none"> ✓ Everyone acknowledged.
MOA Negotiation	<ul style="list-style-type: none"> ▪ Mr. Joey L. Bogay informed the body that we are already done with the decision making process. The IP Community had already submitted their decision citing their approval of the water system. Their approval is called conditional consent. Thus, Mr. Bogay presented to the body the Terms and Conditions agreed last August 6, 2019 for any comments or modifications, to wit: 	

	<p>1) DURATION: 25 years renewable for another 25 years subject to FPIC</p> <p>2) Ritual prior to execution of MOA at the expense of MKWD</p> <p>3) Support in cash or in kind every quarter in any activities related to the preservation of culture, general assemblies and other activities of ICC</p> <p>4) Hiring of 17 ICC within the watershed of Notongon River as job order, casual or regular employees subject to CSC rules and regulations</p> <p>5) Establishment of a tribal hall in Brgy. Buhay, Makilala</p> <p>6) Scholarship for 2 college students, with an allowance of Ten Thousand Pesos (Php 10,000) per semester</p>	<p>✓ Both parties agreed on this matter</p> <p>✓ Both parties agreed on this matter</p> <p>✓ Both parties agreed on this matter</p> <p>✓ Both parties agreed on this matter</p> <p>✓ Both parties agreed on this matter</p> <p>✓ Datu Bienvenido G. Macalos suggested having an additional three (3) scholars – one each from Batasan, Buenavida and Biangan. And this was seconded by Datu Mercado Padayag. The GM responded that MKWD already had scholars from Barangay Batasan. Except for Buenavida and Biangan because we do not have Memorandum of Agreement (MOA). As per initial agreement, we will prioritize the community where the source is located and that is, Barangay Buhay.</p> <p>✓ Datu Jaime M. Odo informed the body that the Barangay involved must be given priority for this program and must see to it that the students are qualified. Mr. Bogay said that we will set criteria or qualifications for this program.</p> <p>✓ It has been resolved that it will remain to two (2) scholars and will re-evaluate it after five (5) years.</p>
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7) Train and hire interested high school graduates of the BAGOBO-TAGABAWA ICC, as private plumbers	✓ Both parties agreed on this matter
8) Assist on the development of the water facilities for subject to technical evaluation	✓ Both parties agreed on this matter
9) Annual medical outreach programs and sanitation programs	<p>✓ Both parties agreed on this matter</p> <p>✓ Ms. Divina Sanade requested to include trainings/seminars for empowerment of women in their community. The GM informed the body that it is part of the office activities or MKWD's Social Responsibility. Therefore, it will be included in the MOA and it will be held annually.</p>
10) Honorarium of One Thousand Pesos (Php 1,000.00) for Core Group Member and Five Hundred Pesos (P 500.00) for Technical Working Group	✓ Both parties agreed on this matter
11) Review the economic and non-economic provisions of this MOA every 5 years	✓ Both parties agreed on this matter
12) MOA Monitoring Committee meet every quarter, expenses to be shouldered by MKWD	✓ Both parties agreed on this matter
13) Posting of bond	<p>✓ AGM Alqueza informed Atty. Paz that the posting of bond will be through GSIS being a GOCC.</p>
14) Grievance – first is customary laws and practices of the BAGOBO-TAGABAWA ICC, if unresolved endorsement to MMC. But administrative matters governed by existing national laws	<p>✓ Datu Bienvenido G. Macalos asked Mr. Joey L. Bogay if the IP Leaders are included in the litigation process in case there will be conflicts? Mr. Bogay answered that they are included because they are also members of the MOA Monitoring Committee.</p>
15) Non-transferability of FPIC	✓ Both parties agreed on this matter

	<p>16) Modifications and amendments must be signed by parties and in writing</p> <p>17) Royalty – 1 centavo per cubic meter, based on actual utilization, of the gross production</p>	<p>✓ GM Both parties agreed on this matter</p> <p>✓ Datu Bienvenido G. Macalos made an inquiry on the basis of the 1 centavo per cubic meter royalty. Mr. Bogay answered that the one centavo per cubic meter is the proposal of Barangay Buhay.</p> <p>✓ Datu Macalos suggested increasing the royalty to 10% of the gross production. GM Stella M. Gonzales informed the body that MKWD is a Government-Owned and Controlled Corporation. The GM further informed the group that MKWD stopped paying royalty tax to Local Government Unit (LGU) because the court decided that we are not allowed to pay for extraction of natural resources.</p> <p>✓ AGM Wilesper Lisandro M. Alqueza informed the body that we should not only focus on the royalty. We should also look into the hiring of these 17 settlers, they would earn to more or less Php 220,000.00 to Php 230,000.00 a month or to more or less P3,000,000.00 a year. With this figure, we can picture out that it is a huge amount of money. Thus, the lives of these people will be uplifted and at the same time, of the community.</p> <p>✓ Datu Mercado Padayag suggested that there must be separate funds for 4Bs CADT.</p> <p>✓ The GM explained to the body that MKWD has no legal basis when it comes to giving of royalty. But agreed to the 1 centavo per cubic meter of the gross production.</p>
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		<ul style="list-style-type: none"> ✓ IPMR Myrna L. Linao informed GM Stella M. Gonzales that the royalty tax will go to ADSDPP and personnel honorarium. GM Gonzales made it clear that MKWD has no jurisdiction as to the disbursement of their royalty tax. It was duly seconded by Mr. Bogay. But GM Gonzales pointed out that it was stipulated in item number 3 that we will support in cash or in-kind every quarter in any activities such as meetings provided that they will make a letter. Aside from that, GM Gonzales added that in item number 10, we will also provide honorarium to Core Group Members amounting to One Thousand Pesos (P 1,000.00) and Technical Working Group to Five Hundred Pesos (P 500.00). ✓ Datu Jaime M. Odo suggested to the body to fix the amount of royalty to Ten Thousand Pesos (Php 10,000.00) per month and payment shall be last day of March, June, September and December. Both parties agreed on this.
<p>Presentation of the proposed Memorandum of Agreement (MOA)</p>	<ul style="list-style-type: none"> ▪ Atty. Ivyrose B. Paz presented to the body what the proposed Memorandum of Agreement looks like. The presentation was in English form but they will translate it to Cebuano. 	<ul style="list-style-type: none"> ✓ Atty. Paz requested to GM Gonzales to furnish them a copy of the Board Resolution allowing her as the authorized representative of MKWD. GM Gonzales gave an assurance to comply ✓ Atty. Paz stresses out that the effectivity of the MOA will be upon the issuance of Certification Precondition (CP) by NCIP. The CP will be released after the deliberation. ✓ Atty. Paz asked GM Gonzales to rephrase the word "shall be renewed" to "can be renewed" under the Article II. Mr. Bogay explained that if we will use the word "shall", it might mean that we do not recognize the voice of the IP community to decide and we cannot reinforce the "shall" without FPIC.

		<ul style="list-style-type: none"> ✓ AGM Alqueza cited that this project entails a lot of money and we do not have an assurance that it will be renewed? What if there are individuals in the near future who have personal interest? That he would sell the source to other entity? Mr. Bogay assured the management that everything will pass through FPIC. Thus, there is no need to worry. ✓ GM Gonzales also cited an incident in one of our sources where the father died and the son took over his position, our agreement with his father was put in jeopardy. IPMR Linao responded that it would not happen again because of the presence of NCIP. Mr. Bogay gave an assurance that NCIP will always be part of the deliberation. ✓ GM Gonzales consented to use the suggested word. ✓ Atty. Paz requested for the final technical description of the 51.83 hectares to be attached as annex to the MOA. ✓ The MKWD and NCIP requested from BAGOBO-TAGABAWA ICC the list of their sacred places inside the ancestral domain and this must be submitted before signing of this MOA. They committed to submit the list. ✓ With regards to the concern of MKWD to Article VIII, NCIP gave an assurance that their office will send a communication ahead of time and other supporting documents such as notice and travel order of the their employee. ✓ Atty. Paz also informed the IP community that MKWD requested to state in the MOA that there will be no human activities inside the 51.83 hectares except for reforestation. The IP community agreed.
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		<ul style="list-style-type: none"> ✓ If in case there will be trees needed to be cut down during the clearing or implementation of the project, GM Gonzales requested that we will be exempted from the penalty and the timber will be given to the IP community. They reached a decision to include it in the MOA. ✓ When there is conflict within the IP Community, GM Gonzales made it clear that MKWD will not withhold payment of royalty share because of it. However, she requested that the IP Community will not interfere with our activities in the area and will not prevent our employees from entering the area. IPMR Linao gave an assurance that it will not happen since all Tribal Leaders are already present in this meeting and that we already gave consent with this agreement. ✓ IPMR Linao raised an issue regarding the hiring of 17 settlers. She informed that Sanchy Lopez has two (2) lots in the area affected by the project. Can he assign a person for the said second lot? GM Gonzales responded that our basis is the number of lot owner and not how big is his lot. At the start, we identified the families directly affected by the proposed project. With the identified recipients, as seen on the map, the lot of areas per family is not uniform. Just like Marcelo Siyo, his two (2) lots are included in the proposed project. However, it was taken as one. Thus, it was decided that there will be no more additional to the identified 17 settlers and that their IP Leaders will be the one to explain it to Mr. Lopez. ✓ Atty. Paz requested the MKWD to expound what does technical evaluation means. AGM Alqueza responded that MKWD will assist in identifying what kind of water facility is needed in the area and it will be considered as project, by virtue of this MOA, when recommended by the Core Group/Technical Working Group.
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	<ul style="list-style-type: none"> ✓ GM Gonzales made it clear that the Core Group must have 3 members and Technical Working Group must have 5 members. The Tribal Leaders will be the one to choose the members for each group. Mr. Bogay informed GM Gonzales that they will rename the group with appropriate one to which the GM approved. ✓ GM Gonzales emphasizes that there will be no sexual preference for as long as he/she is physically fit to work and he/she is endorse by the Tribal Leaders. ✓ GM Gonzales asked Atty. Paz as to whom are we going to address our communication? Can we identify one person or representative? Thus, the group designated CADT Representative Rama Lopez and it will be specified in the MOA. ✓ Since both parties agreed on the presented MOA, Mr. Bogay informed the body that they will now prepare the revised MOA and will submit it to the Regional Review Team. When approve, we will now conduct the Community Validation Assembly – the last step.
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Prepared by:


ROCHELLE O. VILLAROSA
 Secretary B

Reviewed by:


NOLL S. BAQUID
 Watershed Management Specialist

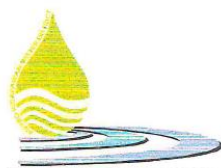
Noted by:


ROSAURO O. DAGA, MBA
 Department Manager A, MD

Attested by:


WILESPER LISANDRO M. ALQUEZA, CE, RMP, MBA
 AGM for Operations


STELLA M. GONZALES, MPS
 General Manager



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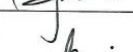




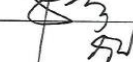



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 Cert. No. 66478

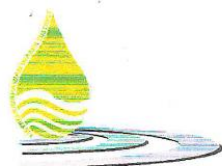
REVIEW AND EVALUATION OF MEMORANDUM OF AGREEMENT (MOA) FOR NOTONGON SPRING SOURCE PROJECT

Monday, September 9, 2019, 9:00AM
 MKWD Mess Hall, Lanao, Kidapawan City
ATTENDANCE

NO.	NAME	DESIGNATION	SIGNATURE
1	STELLA M. GONZALES, MPS	General Manager	
2	WILESPER LISANDRO M. ALQUEZA	AGM for Operations	
3	ROSAURO O. DAGA	Department Manager	
4	NOLI S. BAQUID	Watershed Mngt. Specialist	
5	Mirna L. Linao	Drgy. Buhay IPMR	
6	Dacumos Sanade	Tribal Chieftrian	
7	Rama E. Lopez	Head Claimant	
8	Alonso Landas		ALONSO
9	Peipe Antac		D
10	Marino Landas		LANDAS M.
11	Mercedo Padayan		
12	Djuna E. Sanadi	Tribal Secretary	
13	Bienvenido G. Macalos	4B's Head Claimant	
14	JAYNE M. ORO SR	4B'S HEAD CLAIMANT	
15	MICHELLE MAE A. ABIG-OS	AA - N	

NO.	NAME	DESIGNATION	SIGNATURE
16	JOEY C. BOGAY		
17	JOYCE MARQUE J. MONDRAGON	NCAP	
18	LEONARDO A. AGUIRRE, J.R.		
19	INOCENCIO B. PAZ		
20	JIMMY B. BATAWANG	DRIVER - 1	
21	CONRADO LAKANAN	DRIVER	
22			
23	JEMIMA A. ALFANTA-CHUA	AGM for Admin & Finance	
24	LALAINA A. WITARA	Dept. Manager - CSD	
25	RAMIL A. CONDEZ	Dept. Manager - ECD	
26	MYRNA R. VICTORIA	Dept. Manager - AHRD	
27	MERLE E. AVILA	Div. Manager - AHRD	
28	ROSEMINDA M. PASON		
29	BRENDANIL D. PADUGA		
30	JUNVALH B. ARENAL		
31	JUAN C. NODALD		
32	JUSTINE JOY D. AGUILAR		
33	KEELAH JEMIMA R. SORIANO		
34	ELSIE N. GUILARAN	Dept. Manager - PSD	
35	RICHELLE R. FEDERE		

5. Memorandum of Agreement Signing Ceremony on the Notongon Intake Development Project



Republic of the Philippines
METRO KIDAPAWAN WATER DISTRICT
 Lanao, Kidapawan City
 Tel nos. (064)577-1533, 577-1865, Fax no. (064) 572-5555
 E-mail Address: metrokidapawan_wd@yahoo.com
 Website: www.metrokidapawanwd.gov.ph
"Committed to Service, Development and Self-Reliance"



MEMORANDUM OF AGREEMENT SIGNING CEREMONY ON THE NOTONGON INTAKE DEVELOPMENT PROJECT

Thursday, October 10, 2019, 9:00AM
 Covered Court, Barangay Buenavida, Makilala, Cotabato

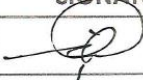

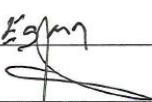
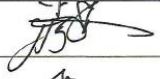

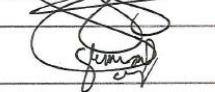


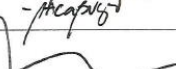

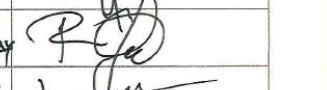


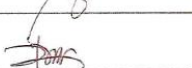
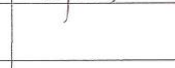


ATTENDANCE

NO.	NAME	DESIGNATION	SIGNATURE
1	STELLA M. GONZALES	General Manager	
2	WILESPER LISANDRO M. ALQUEZA	AGM for Operations	
3	ROSAURO O. DAGA	Department Manager	
4	RAMIL A. CONDEZ	Department Manager	
5	ELBEN S. DAQUIPA	Department Manager	
6	CANUTO A. CODILLA, JR.	Division Manager	
7	NOLI S. BAQUID	Watershed Mgt. Specialist	
8	JUNVALH B. ARENAL	Acting IO - A	
9	JUSTINE JOY D. AGUILAR	Secretary II	
10	RUDOLPH F. ESTRELLA	Driver	
11	HARLEY LYSTER N. GONZAGA	Driver	
12	Myrna L. Linao	IPMR	
13	Dacumos Sanode	Tribal chieftain	
14	Mercado Patayag	Brgy. head Claimant	
15	Bienvenido G. Macalos	4Bs Head Claimant	
16	Dela Trina Oda	Dominial IPMR	

October 10, 2019

MOA Signing Ceremony

Page 2 of 4

NO.	NAME	DESIGNATION	SIGNATURE
20	Romet L. Egkil	BIC / COE	
21	Felipe C. Antac	ADTC	
22	Alonso D. Landas	BIC / COE	ALONSO
23	Marino D. Landas	ADTC / Takap	LANDAS M.
24	Egan V. Embad	BIC Council of Elders	Egan
25	Jonel B. Malate	STAVETZ	
26	Emilio C. Sularso Ja	Farmes	
27	CONRADO ARUMAR	DRIVER	
28	Lanceky Lopez	COUNCIL ELDER	
29	Jannichy D. Lumosan	Engineer I	
30	Katty Khee S. Bulilan	Atty. IV	
31	ERIC M. RAZ	Acting Chief TMAD	
32	NICHELE MAE A. CAOTE-OS	AA- N	
33	NIKOSE B. PAZ	PLD	
34	LEONARDO A. AGUANAN	ENGR - II	
35	Rama E. Lopez	Head element CAPT BUNYAY	
36	EDWIN E. MATONG	Barry Sgawad Queen U.Sa	
37	ESTUARDO B. SORONGON JR.	DRIVER	
38	MART VINE BUCAS		
39	ROSEMINDA M. PASON		
40			
41			
42			
43			

6. Meeting with Matiboggo Claimants



April 28, 2020

WILESPER LISANDRO M. ALQUEZA, CE/RMP/MBA
AGM for Operations
This Office

SUBJECT: ACTIVITY REPORT ON MEETING WITH MATIBOGGO CLAIMANTS

Sir:

Respectfully endorsing to your end the Activity Report on the conducted meeting with claimants of Matiboggo Source at Sitio Apoy-Apoy, Brgy. Buenavida, Makilala on April 8, 2020 @ 10:00 a.m at MKWD Covered Court, Lanao, Kidapawan City.

With the output of the meeting, we would like to recommend the activities after the said meeting as stated, to wit:

1. Site delineation including production inventory.
2. Watershed risk assessment with evaluation on the headwaters and tributaries.
3. Process compliance to FPIC and environmental requirements.

Attached are, activity report, photos and attendance of the meeting.

For your information and reference.

Very truly yours:

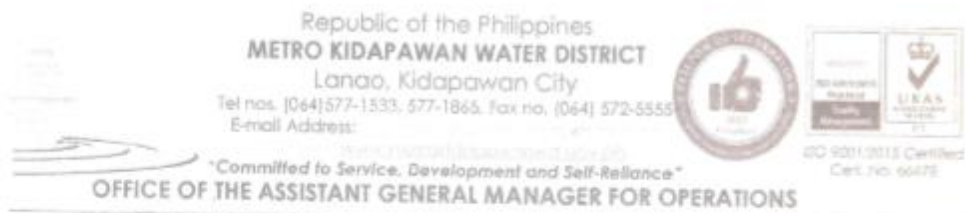

FOR. NOLL S. BAQUID
Watershed Mgt. Specialist

Checked by:


ROSAURO O. DAGA, MBA
Dept. Manager A, MD

Noted by:


WILESPER LISANDRO M. ALQUEZA, CE/RMP/MBA



Activity Report

Activity: MEETING WITH MATIBOGGO CLAIMANTS
 Date/Time: April 8, 2020 @ 10:00 A.M – 12:00 N.N.
 Venue: MKWD Covered Court, Lanao, Kidapawan City
 Attendees: (See attached attendance sheet)

Agenda/Key Areas	Issues Discussed/Highlights	Action Taken/Agreements
I. Preliminaries	<p>A. Prayer</p> <p>B. Acknowledgement of Participants</p>	<ul style="list-style-type: none"> ➢ Lead by Ptr. Joselino Ando Jr. ➢ Given by Datu Jaime M. Odo for Matiboggo claimants and Brgy. Buenavida CADT Officials ➢ Given by GM Stella M. Gonzales, MPS for MKWD participants
<p>II. Main Agenda of the Meeting</p> <p>A. Proposed Utilization of Matiboggo Source at Sitio Apoy-Apoy, Brgy. Buenavida, Makilala</p>	<ul style="list-style-type: none"> - Initial feedback and approval of the CADT Officials of Brgy. Buenavida, Makilala 	<ul style="list-style-type: none"> ➢ GM Gonzales explained to the group the purpose of the meeting in line with the plan of the district to utilize the Matiboggo source. ➢ GM Gonzales gave the time to AGM Alqueza to give highlight on the propose project of the district at Matiboggo source.

		<ul style="list-style-type: none">➤ AGM Alqueza presented to the group of Datu Odo that due to the severe decreased of water supply at Notongon source, the district plan to simultaneously develop and utilize the Matiboggo source to address the water supply crisis at Makilala area and nearby MKWD service areas.➤ GM Gonzales asked the group of Datu Odo for their initial response on the proposed project of MKWD at Matiboggo Source.➤ Before the members of CADT Officials of Brgy. Buenavida, Makilala gave their response to the proposal presented by GM Gonzales, Datu Odo explained to the group that their individual decision and idea is greatly recognized as an IP leader.➤ Every decision made during the meeting will be the legal basis for future transaction.
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	<p>- Processing of MOA and FPIC</p>	<ul style="list-style-type: none"> ➤ Each CADT Officials gave their feedbacks and comments to the proposed project within their ancestral domain and all decision are favorable to the district. ➤ All of them including Datu Odo are open for the proposed project within their ancestral domain. ➤ GM Gonzales asked Datu Odo if there are other way to shortened the period on the processing and preparation of FPIC and MOA. ➤ Urgent implementation of the proposed project is highly needed to address the shortage of water supply as affected by 2019 earthquake and Covid-19 crisis. ➤ Datu Odo will coordinate to NCIP office regarding the said matter for possible procedures to fasten the FPIC and MOA processing.
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	<p>- Other Matters</p> <p>A. Series of schedules for evaluation of Matiboggo Source</p>	<ul style="list-style-type: none"> ➤ Datu Odo also mentioned regarding voluntary offer of 4B's CADT to MKWD to utilized the Matiboggo Source as immediate response to current water crisis as one method to shortened the FPIC processes set under RA 8371. ➤ The same will also referred by Datu Odo to NCIP office. ➤ Datu Odo will also conduct meeting with the 4B's CADT Officials and the IP community to discussed those concerns. ➤ GM Gonzales requested to Datu Odo to allow MKWD personnel to freely enter in the area to conduct evaluation and further study of the source from time to time. ➤ Datu Odo replied that anytime there are MKWD personnel visit in the area for the said purpose, MKWD will informed them so that they could assist the personnel in the area.
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		<ul style="list-style-type: none">➤ This is also for safety purposes of the personnel since the area is critical.➤ There is no other concern discuss in the meeting.
		<ul style="list-style-type: none">➤ The meeting adjourned at 11:30 A.M

Prepared by:


FOR. NOEL S. BAQUID
Watershed Mgt. Specialist

Noted by:


ROSAURO O. DAGA, MBA
Department Manager A.MD

Attested by:


WILESPER LISANDRO M. ALQUEZA, CE/RMP/MBA
AGM for Operations



Meeting with Maliboggo claimants at MKWD Covered Court, Lanao, Kid. City on April 8, 2020 @ 10:00 A.M to discussed the proposed utilization of the source.





Republic of the Philippines
METRO KIDAPAWAN WATER DISTRICT
 Lanao, Kidapawan City
 Tel nos. (064)577-1533, 577-1865, Fax no. (064) 572-5555
 E-mail Address: metrokidapawan@wkd.kidapawan.gov.ph
 Website: www.metrokidapawan.gov.ph
"Committed to Service, Development and Self-Reliance"










ISO 9001:2015 Certified
 Cert. No. 66478

Meeting with Matiboggo Source Claimants

Wednesday ♦ April 8, 2020 ♦ 10:00AM
 MKWD Covered Court, Lanao, Kidapawan City

ATTENDANCE

#	NAME	DESIGNATION	SIGNATURE
1	YARME ODO, JR		
2	Pulang S. Alan		
3	AMPI S. DAVID		
4	Joseline Ando		
5	ELVIE B. MANAYA		
6	CONRADO BARANIK		
7	STELLA M. GONZALES	GENERAL MANAGER	
8	WILSPER LEONARDO M. ALAVEZA	AGM - OPERATIONS	
9	RAMIL A. CONDEZ	REP. MANAGER	
10	STANIS A. CODINA, JR.	DV. MANAGER	
11	Noli S. Baguid	WDMS	
12	JUNVAL A. XREVAL	FCG. INF. OFFICER	
13			
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ANNEX 2

Gender Action Plan

GENDER ACTION PLAN

1. **Gender Classification.** The purpose of the Project is to target less resilient water districts (WDs) in cities and municipalities outside Metro Manila including the WDs in San Fernando (La Union) and the City of Koronadal, to fund the extension and rehabilitation of their water supply (e.g., the construction of new deep wells, transmission and distribution pipelines) and sanitation projects, as well as capacity building development and institutional strengthening for the executing agency, Local Water Utilities Administration (LWUA) and WDs. Women will benefit from the Project through affordable tariffs and other pro-poor initiatives, capacity building and representation on WD Boards. The project is classified as effective gender mainstreaming (EGM) in design.

2. **Gender Action Plan (GAP) Purpose and Strategy.** The 2009 socio-economic survey shows that a small portion of households in the target WDs have piped water connections and sanitation facilities (11-18%). Among the poor in these cities, 90% of them don't have water connections despite LWUA's socialized tariff policy. The significant social and economic burden of illness, health care for the family, child care, water fetching, food preparation and other associated domestic responsibilities associated with not having water and sanitation connections, falls primarily on women. Women are positioned to benefit from the project's interventions due to their central role in water, hygiene and sanitation management. At the community level, women's participation in water system operations is low as there are no formal water associations in the pilot service areas in which they could participate in the operation and maintenance of water and sanitation facilities. The Government's existing framework for gender action is not being maximized by LWUA and the pilot WDs.¹ LWUA and the pilot WDs have designated gender focal points and gender and development (GAD) programs. However, their GAD budgets have not been fully utilized, with limited gender-specific activities such as capacity-building for increased women's participation in technical operational roles. The Project's gender strategy will facilitate women's participation and benefits through GAP implementation (see Table below). These include enhanced hygiene and sanitation awareness and training, connections to proper water supply and sanitation, capacity building, and representation on WD Boards. Pro-poor measures include lifeline tariffs and initiatives for affordable access (e.g. socialized and/or installment schemes for connection fees).

3. **Implementation and Monitoring Arrangements.** The Borrower shall ensure that it complies with all relevant laws and regulations related to gender actions.² A responsibility center will be created at LWUA/project management unit (PMU), with the designation of an employee to monitor GAP implementation by LWUA and participating WDs (including preparing 6-monthly progress reports and ensuring that the bidding documents and contracts include relevant provisions for contractors to comply with the measures set forth in the GAP) and to provide implementation support to the conduct of GAP activities, such as training and capacity-building on required competencies of the project implementation units (PIUs) in compliance with those aspects of the GAP applicable to the WD. Similarly, each WD will be set up a responsibility center and a gender focal person responsible for preparing and implementing a gender action plan for the WD in order to ensure the WD's compliance with those aspects of the GAP

¹ Including Republic Act No. 7192 ("Women in Development and Nation-Building Act" passed on February 12, 1992), Executive Order No. 273 ("Approving and Adopting the Philippine Plan for Gender-Responsive Development, 1995 to 2025" passed on September 8, 1995), and Joint Circular No. 2004-1 issued by the Department of Budget and Management (DBM), the National Economic and Development Authority (NEDA) and the National Commission on the Role of Filipino Women which prescribes guidelines and procedures for the formulation and submission of agency annual GAD plans and budgets, and GAD accomplishment reports.

² See footnote 1.

applicable to the WD, including the preparation of budgets for, and the implementation, updating and monitoring of, the WD's gender action plan. Other staff members of the WD will be engaged to assist with various activities in the WD's gender action plan.

4. **GAP Budget.** LWUA will allocate a yearly budget for the implementation of the GAP, which will be taken from its GAD budget. In addition to enhancing its own GAD capacity, LWUA will work with participating WDs to ensure that compliance with those aspects of the GAP applicable to them.

Table 11.1 GAP Budget (pesos)

Budget Item	Year 1	Annual Budget Years 2 to 6
Training of LWUA's and WDs' gender focal points on GAP implementation and monitoring	400,000	200,000
Capacity building of LWUA and WDs staff on gender analysis, gender-responsive planning and budgeting	600,000	300,000
Supervision and monitoring of GAP implementation – database creation and maintenance	200,000	200,000
Total	1,200,000	700,000

GAP = Gender Action Plan, LWUA = Local Water Utilities Administration, WD = water district

Table 11.2 Summary of Gender Action Plan

Project Output	Proposed Actions and Targets
Client-Focused	
Output 1: Expansion and improvement of water supply systems; sanitation projects	<ul style="list-style-type: none"> ➤ Information dissemination on new water services targeting poor households in the existing and expansion water service areas. ➤ Promoting affordability to low-income households including ensuring the minimum charge for monthly water consumption should meet LWUA's guidelines for low-income households in the areas served by participating water districts (WDs). ➤ Partnership with barangay health workers/units and non-government organizations (NGOs) for delivery of sanitation information education and communication (IEC) and training. Per subproject, IEC training for 100 barangay health workers, science, public school teachers (50% are female). ➤ Ensuring WDs consult with women and men separately about content, format, and media for IEC messages.
Organization-Focused	
Output 2: Capacity and institutional development for participating WDs and LWUA.	<ul style="list-style-type: none"> ➤ Training to enhance sustainability of operations for WDs (business planning, project implementation, management information system [MIS], non-revenue water [NRW] reduction) (at least 30% of participants are female).³ ➤ Designation of an employee to coordinate, monitor and report on implementation of GAP activities. ➤ Capacity development of LWUA/WDs in gender analysis, gender-responsive planning, gender budgeting, and GAP compliance. ➤ At least 30% of LWUA's overall staff and management at project management unit are female.⁴ ➤ Encouraging the appointment of at least 2 women on the Board of each participating WD, of which one is a representative of a women's organization (e.g. a relevant NGO or national women's group). ➤ Allocation from LWUA's yearly GAD budget to its GAP budget to support project implementation. ➤ Detailed project performance monitoring (including compliance with GAP), reporting, accounting, and auditing systems developed, with collection of sex-disaggregated data, provide 6-monthly reports and feed data into mid-term review and Project Completion Report.

³Baselines will be collected for LWUA and each participating WD. If the baseline indicates a higher % of female representation than the 30% target, an appropriate higher target will be incorporated and reported to ADB.

⁴See footnote 3.

ANNEX 3

Resettlement Framework and Indigenous Peoples Planning Framework

Resettlement Framework

March 2014

Philippines: Water District Development Sector Project

Prepared by Local Water and Utilities Administration for the Asian Development Bank.

CURRENCY EQUIVALENTS

(as of 19 March 2014)

Currency unit	–	peso (Php)
Php1.00	=	\$0.0224074572
\$1.00	=	Php 44.63

ABBREVIATIONS

ADB	–	Asian Development Bank
AH	–	affected household
AP	–	affected person
CKWD	–	City of Koronadal Water District
DA	–	Department of Agriculture
DMS	–	detailed measurement survey
EA	–	executing agency
EMA	–	external monitoring agency
GAD	–	gender and development
GAP	–	gender action plan
GRC	–	Grievance Redress Committee
GRM	–	Grievance Redress Mechanism
HH	–	Household
IA	–	Implementing Agency
IOL	–	Inventory of losses
IP	–	Indigenous Peoples Plan
LGU	–	Local Government Unit
LWUA	–	Local Water and Utilities Administration
m ³	–	cubic meter
MDG	–	millennium development goal
MSFWD	–	Metro San Fernando (La Union) Water District
NEDA	–	National Economic and Development Authority
NRW	–	non-revenue water
PCUP	–	Presidential Commission on the Urban Poor
PIB	–	public information booklet
PIU	–	project implementation unit
PMU	–	project management unit
PPTA	–	project preparatory technical assistance
OCR	–	ordinary capital resources
RF	–	Resettlement Framework
ROW	–	right-of-way
RP	–	Resettlement Plan
SAR	–	Subproject Appraisal Report
SES	–	Socio-economic Survey
SPS	–	ADB's Safeguard Policy Statement (2009)
UFPF	–	Urban Financing Partnership Facility
WACC	–	weighted average cost of capital
WD	–	Water District
WDDSP	–	Water District Development Sector Project
WDRC	–	Water District Resettlement Committee

GLOSSARY

- Affected People (APs)** – includes any person, entity or organization affected by the Project, who, on account of the involuntary acquisition of assets in support of the implementation of the Project, would have their (i) standard of living adversely affected; (ii) right, title or interest in all or any part of a house and buildings, pavements and other physical improvements, land (including residential, commercial, agricultural, plantations, forest and grazing land), water resources, annual or perennial crops and trees, or any other moveable or fixed assets acquired or possessed, in full or in part, permanently or temporarily; and (iii) business, profession, work or source of income and livelihood lost, partly or totally, permanently or temporarily
- Compensation** – the payment in cash or in kind at replacement cost for an asset affected or to be acquired by the Project.
- Eligibility cut-off date** – the date that a population record or census, preferably at the project preparation stage, has been conducted and is determined to be the basis for qualifying persons who are eligible to receive entitlements under a Resettlement Plan (RP). The purpose of setting a cut-off date is to prevent a subsequent influx of encroachers or others who wish to take advantage of such benefits. The cut-off date will be the date of the start of the census for the RP.
- Entitlement** – refers to a range of measures comprising compensation in cash and/or in kind for loss of land and non-land assets, including assistance for income restoration and relocation and special support to poor and vulnerable households.
- Land Acquisition** – is the process whereby a person is compelled by the Government through the Executing Agency/Implementing Agency of the Project to alienate all or part of the land s/he owns or possesses in favor of the Government in the implementation of the Project or any of its components in return for compensation.
- Relocation** – the physical shifting of an AP from his/her pre-project place of residence and/or business to another place.
- Replacement Cost** – the amount in cash or in kind needed to replace an asset and is the value determined as compensation for:
- a. Agricultural land based on market prices that reflect recent land sales prior to the commencement of the subproject or displacement, and in the absence of such recent sales, based on assessed and prevailing market value;
 - b. Residential land based on market prices that reflect recent land sales prior to the commencement of the subproject or displacement, and in the absence of such recent land sales, based on similar location attributes;
 - c. Houses and other related structures based on prevailing market prices of materials and labor, without depreciation nor deductions for salvaged building materials;
 - d. Crops based on prevailing market value;
 - e. Trees and other perennials based on prevailing market value; and
 - f. Other assets (i.e., income, community facilities) based on

replacement cost or the cost of mitigating measures.

- Rehabilitation** – means assistance provided to severely affected APs due to the loss of 10% or more of productive assets (i.e., farmland, crops and trees, vegetable garden, etc.), incomes, and employment, or when sources of living such as shops and places of employment have to be reconstructed completely and/or relocated. The livelihood support may be given in cash or in kind or a combination of the two in order to improve or at least achieve full restoration of living standards to pre-project levels.
- Resettlement** – is considered significant where 200 or more people experience major impacts. Major impacts are defined as involving APs being: (i) physically displaced from housing, place of residence and sources of income, and/or (ii) losing 10% or more of their productive, income-generating assets. APs experiencing major impacts are referred to as “severely affected APs”.
- Structures and structural losses** – refer to losses to constructed assets, residential houses, pavements, driveways, institutional structures, utility structures, business structures with residences attached to it and other income-producing spaces
- Severely Affected Persons** – are those who experience major impacts due to: (i) being physically displaced from their housing, place of residence and sources of income, and/or (ii) loss of 10% or more of their productive, income-generating assets.
- Vulnerable Groups** – are distinct groups of people who might suffer disproportionately or face the risk of being further marginalized by the effects of resettlement and specifically include: (i) households headed by women, the elderly or disabled, (ii) households living below the poverty threshold, (iii) the landless, and (iv) indigenous people and ethnic minorities.

NOTE

In this report, "\$" refers to US dollars.

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INTRODUCTION

A. Project Background

1. The Project will fund the expansion and rehabilitation of water supply systems, and pilot sanitation projects of water districts (WDs) outside Metro Manila, in order to reduce the occurrence of water-related diseases. The total Project Cost is \$76 million. The Government has requested ADB to provide a \$60 million sector loan for WDs. The Urban Environmental Infrastructure Fund Grant under the Urban Financing Partnership Facility (UEIF-UFPF) will provide a \$2 million grant to subsidize pilot sanitation facilities. Funds are expected to be channeled to WDs through the Local Water Utilities Administration (LWUA).¹

2. Rapid urbanization and inadequate water supply and sanitation investments have stretched to the limit the capacity of services and facilities in many urban areas outside Metro Manila, and increased water resources pollution. Less than 50% of urban households are estimated to have piped water, with most served by WDs. Various studies report that WDs provide better water service compared to local government unit (LGU)-run water utilities, and attribute this to corporatization (i.e., WDs do not receive subsidies from LGUs) and to access to financing, training and technical assistance from LWUA.

3. Supporting WDs will help the Government achieve its millennium development goals (MDGs) for safe water and improved sanitation. The Project will provide to WDs much-needed funds to rehabilitate and expand water facilities, strengthen institutional capacities, and enhance sustainability. According to LWUA, 511 WDs were operational at year-end 2012. Most WD operations are plagued with low profitability, high nonrevenue water (NRW) levels, and weak institutional and limited technical capacity; over half are relatively small (with <3,000 service connections). The Project will target WDs who rely primarily on LWUA for technical support and financing; these WDs are likely to be in less developed provinces, cities and municipalities. The Project will also raise awareness about sanitation and seek to fund pilot sanitation facilities.

4. A project preparatory technical assistance (PPTA) prepared feasibility studies and safeguard documentation for the subprojects of two pilot WDs, City of Koronadal WD (CKWD) and Metro San Fernando WD (MSFWD), which have affirmed their interest in participating in the Project.² LWUA confirmed strong interest from other WDs for the remaining available funding under the Project.

B. Scope of the Resettlement Framework

5. This Resettlement Framework (RF) presents the general guidelines and procedures for preparing Resettlement Plans (RPs) for subprojects under the Project. The LGUs in the City of Koronadal confirmed that public land will be made available for CKWD's water supply and

¹ In 1973, to address grossly inadequate water supply and sanitation infrastructure outside Metro Manila, the Provincial Water Utilities Act (Presidential Decree 198) was passed to (i) encourage local government units (LGUs) to form water districts (WDs), corporatized entities to supply water within a franchise area, without subsidies from LGUs, and (ii) establish LWUA, a government-owned specialized lender/tariff regulator/institutional development advisor for WDs.

² A \$1.5 million PPTA (including \$0.3 million from the Government) was approved in 2007. Five pilot WDs were selected based on criteria established in 2008 by the Project stakeholders (e.g., "creditworthiness" as defined by LWUA, interest to participate, and readiness), the PPTA prepared feasibility studies and the final PPTA report submitted in May 2010. Processing of the loan was put on hold until the appointment of a new management at LWUA. In January 2012, the Government renewed its interest in finalizing the Project and ADB reengaged the PPTA consultants. Of the original five pilot WDs, CKWD and MSFWD are the remaining pilot WDs.

sanitation subprojects. An RP was prepared under the PPTA for MSFWD's subproject (water supply) where land acquisition is expected. The RP follows a process consistent with ADB's **Safeguard Policy Statement 2009** (SPS),³ and Philippine laws on land acquisition and compensation. RPs of additional subprojects under the Project, if required during implementation, will be formulated using this RF and will be reviewed and endorsed by the executing agency (EA), prior to submission for ADB's approval.

A. LEGAL FRAMEWORK

A. Philippine Laws and Policies

6. The Philippine Constitution states that the protection of property is State Policy and is essential for Filipinos to enjoy the benefits of democracy. Private property is the right of every citizen. The Constitution also states that it prohibits depriving any person of his property without due process and no taking of property is allowed by law without just compensation. Existing legislation and guidelines that address various aspects of land acquisition and resettlement include among others Executive Order 1035, Republic Act (RA) 6657, RA 7160, RA 7279, RA 8435, and RA 8974. **Table 16.1** describes the laws and statutes applicable to aspects of resettlement.

**Table 16.1: Laws and Statutes Governing Resettlement in the Philippines
Applicable to WDDSP**

Aspects of Resettlement	Laws and/or Statutes	Description
Community Participation and Consultation	R.A. No. 7160 (Local Government Code), Sections 2 (c) and 27.	Provide prior consultation with affected communities on any project and require the approval of the concerned Sangguniang Panglungsod (municipal council)
	R.A. No. 7279 (UDHA Law), Article I, Sec. 2; Article V, Sec. 23; Article VII, Sec. 28 (2) and IRR of UDHA, Sec. 3 (e.1)	The provisions of this law also require consultations with affected persons and communities. The results of consultations will form part of the approval of the RP by the local government units (LGU's) Sangguniang Panglungsod (SP); Sangguniang Bayan (SB)
	RA No. 8435 (Agriculture and Fisheries Modernization Act of 1997)	Consultation and participation of farmers, fisher folks and agrarian reform communities (ARCs) and other stakeholders
Land Acquisition	R.A. No. 7160 (Local Government Code), Section 19.	Provision for the LGUs or sub-national administrative entities in the exercise of the power of eminent domain but it can only be applied for "public use or purpose or for the benefit of the poor and the landless" and property owners will be paid just compensation.
	EO 1035 R.A. No. 8974 (Guidelines for Government Acquisition of Right of Way or Site Location)	Facilitating the Acquisition of Right-of-Way (ROW), Site or Location of National Government Infrastructure Projects and for Other Purposes.
	R.A. No. 7279 (Urban Development and Housing Act of 1992)	Provision for the development, award and disposal of land under usufruct arrangement for purpose and use of socialized housing and urban services.

³ <http://www.adb.org/sites/default/files/pub/2009/Safeguard-Policy-Statement-June2009.pdf>

Aspects of Resettlement	Laws and/or Statutes	Description
	<p>Comprehensive Agrarian Reform Law Republic Act 6657 (1988)</p> <p>Republic Act 6389</p>	<p>RA 6657 Section 28 states that landowner shall retain his share of any standing crop un-harvested at the time the Department of Agrarian Reform (DAR) shall take possession of the land under Section 16 of this Act, and shall be given a reasonable time to harvest</p> <p>RA 6389 states that "in the event of change in land use from agriculture to other uses, agricultural lessees are entitled to disturbance compensation equivalent to five times the average of the gross harvests on his landholding during the last five preceding calendar years."</p>
Compensation	R.A. No. 8974, Sections 8, 9, 10 and 13.	<p>Provides for the compensation of affected properties based on prevailing market prices. RA 8974 - An Act to Facilitate the Acquisition of ROW</p> <p>Site or Location for National Government Infrastructure Projects. The Implementing Rules and Regulations (IRR) of this law stipulates that the Implementing Agency shall negotiate with the owner for the purchase of the property by offering first the current zonal value issued by the Bureau of Internal Revenue (BIR) for the area where the private property is located. Further, that valuation of improvements and/or structures on land to be acquired shall be based on the replacement cost, defined as the amount necessary to replace the structure or improvement based on the current market prices for materials, equipment, labor, contractor's profit and overhead, and all other attendant costs associated with the acquisition and installation in place of the affected improvements/installation.)</p>
Poor/Informal Settler	<p>R.A. No. 7279 (UDHA Law), Article V, Sections 21 and 22. Implementing Rules and Regulations of UDHA, Section 3, III (b.3.0)</p> <p>EO 1035 Sec.17 and 18</p>	<p>For urban poor, provision for basic services and livelihood component under socialized housing and urban services. They are not to be evicted nor their dwellings demolished except in accordance with the law in a just and humane manner (Constitution). Assistance is limited to payment at replacement cost for structures and improvements. Additional assistance may be provided on a case by case basis.</p> <p>Relocation/resettlement of tenants /occupants affected by Property /ROW Acquisitions. Financial assistance to be given to tenants/farmers equivalent to the value of the gross harvest for one year on the principal and secondary crops of the area acquired, based on the average annual gross harvest of the last three preceding crop years and in no case, financial assistance be less than Php15,000 per hectare.</p>
Gender equality /Women in development	<p>RA 7192</p> <p>Sec. 5</p>	<p>Promotes the integration of women as full and equal partners of men in development and nation building. All government departments will ensure women benefit equally and participate directly in the development programs and projects specifically those funded under foreign development assistance, to ensure their full participation and involvement in the development process; to provide income and employment opportunities to women and asses extent to which such programs helped in enhancing their self reliance.</p> <p>Women of legal age has the capacity to enter into contract; has the capacity to borrow and obtain loans and execute security and credit arrangements under the same conditions as men/act as incorporators and enter into insurance contracts and secure travel</p>

Aspects of Resettlement	Laws and/or Statutes	Description
		visas without the consent of their spouses, among others.
Monitoring	Executive Order No. 152 (Series of 2002)	Prescribes the broad monitoring of all types of eviction and demolitions involving the underprivileged and homeless citizens by the PCUP. All national government agencies and local government units should apply for Certificate of Compliance prior to the implementation of eviction and demolition.
Disclosure	Constitution RA 7279	States "full public disclosure by the State of all its transactions involving the public interest" and "the Citizens have the right of access to information on matters of public concern." Requires that all households affected are informed of any proposed development plan.

B. ADB Policies

7. Consistent with ADB's **Safeguard Policy Statement 2009 (SPS)**⁴, the aim of ADB's **Policy on Involuntary Resettlement** is to avoid involuntary resettlement wherever possible and to minimize involuntary resettlement by exploring project and design alternatives. It also aims to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels, and to improve the standards of living of the displaced poor and other vulnerable groups.

8. The specific objectives and principles of ADB's Policy on Involuntary Resettlement are as follows:

- a. Screen the project early to identify past, present and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.
- b. Carry out meaningful consultations with affected persons, host communities and concerned non-government organizations. Inform all displaced persons of their entitlements and resettlement options. Insure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and indigenous peoples, and those without legal title to land and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns. Support the social and cultural institutions of displaced persons and their host population. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.
- c. Improve, or at least restore, the livelihoods of all displaced persons through (i) land-based resettlement strategies when affected livelihoods are land-based where possible, or cash compensation at replacement value for land when the loss of land does not undermine livelihoods, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot

⁴ <http://www.adb.org/sites/default/files/pub/2009/Safeguard-Policy-Statement-June2009.pdf>

be restored, and (iv) additional revenues and services through benefit-sharing schemes where possible.

- d. Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and productive opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.
 - e. Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal affordable access to adequate housing.
 - f. Develop procedures in a transparent, consistent and equitable manner if land acquisition is through negotiated settlement, to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.
 - g. Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.
 - h. Prepare the RP elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget and time-bound implementation schedule.
 - i. Disclose a draft RP, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders.
 - j. Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of the project's costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.
 - k. Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the RP under close supervision throughout project implementation.
 - l. Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the RP have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring results.
9. The SPS also provides more specific policies to be observed by the borrower/client with regard compensation to displaced persons. These are:

- a. The absence of legal title to land is not a barrier to compensation and rehabilitation of affected people. All people adversely affected by the Project are entitled to the assistance to restore pre-project conditions through compensation, resettlement and livelihood restoration. The poorest and vulnerable affected people, including households headed by women, the elderly, disabled, ethnic minorities, and the landless, must be assisted to improve their socio-economic conditions.
- b. The rate of compensation for acquired housing, land and other assets will be calculated at full replacement cost. The calculation of full replacement cost will be based on the following elements: (i) fair market value; (ii) transaction costs; (iii) accrued interest; (iv) transitional and restoration costs; and (v) other applicable payments, if any. In the calculation, depreciation of structures will not be taken into account. It is expected that qualified and experienced experts will undertake the valuation of acquired assets.
- c. In the case of economically displaced persons, regardless of whether or not they are physically displaced, the borrower/client will promptly compensate for the loss of income or livelihood sources at full replacement cost. The borrower/client will compensate economically displaced persons for lost assets such as land, crops, irrigation infrastructure, and other improvements made to the land⁵ at full replacement cost. In cases where land acquisition affects commercial structures, affected business owners are entitled to (i) the cost of reestablishing commercial activities elsewhere; (ii) the net income lost during the transition period; and (iii) the costs of transferring and reinstalling plant, machinery and other equipment. Business owners with legal rights or recognized or recognizable claims to land where they carry out commercial activities are entitled to replacement property of equal or greater value or cash compensation at full replacement cost.
- d. The borrower/client will ensure that no physical displacement or economic displacement will occur until (i) compensation at full replacement cost has been paid to each displaced person, (ii) other entitlements listed in the RP have been provided to displaced persons, and (iii) a comprehensive income and livelihood rehabilitation program, supported by an adequate budget, is in place to help displaced persons improve, or at least restore, their incomes and livelihoods.

10. ADB's **Policy on Indigenous Peoples** defines "indigenous peoples" in a generic sense to refer to a distinct, vulnerable, social and cultural group possessing the following characteristics in varying degrees: (i) self-identification as members of a distinct indigenous cultural group and recognition of this identity by others; (ii) collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories; (iii) customary cultural, economic, social or political institutions that are separate from those of the dominant society and culture; and (iv) a distinct language, often different from the official language of the country or region. In considering these characteristics, national legislation, customary law, and any international conventions to which the country is a party will be taken into account. A group that has lost collective attachment to geographically distinct habitats or ancestral territories in the project area because of forced severance remains eligible for coverage under this policy.

11. ADB's **Policy on Indigenous Peoples** is "designed to promote the participation of indigenous peoples in project preparation and implementation, to ensure that they benefit from

⁵ In the case of affected persons without legal title to land, the AP will be compensated at full replacement cost for affected non-land assets.

development interventions that would affect them, and to provide effective safeguards against any adverse impacts". In any ADB interventions, the approaches to be used are as follows: (i) to achieve the greatest possible reduction of poverty among the affected indigenous peoples; (ii) when negative impacts are unavoidable, they should be minimized as much as possible, and appropriate measures will be taken to mitigate the adverse impacts; (iii) in enhancing the benefits of a development intervention for indigenous peoples or reducing negative impacts of a development intervention, clear mechanisms for accurate and objective analysis of their circumstances will be prepared; and (iv) the mechanisms for any intervention must be transparent and should ensure accountability.

12. ADB's **Policy on Gender and Development** adopts gender mainstreaming as a key strategy for promoting gender equity, and for ensuring that women participate and that their needs are explicitly addressed in the decision-making process. For projects that have the potential to have substantial gender impacts, a gender action plan is prepared to identify strategies to address gender concerns and the involvement of women in the design, implementation and monitoring of the project.

13. The SR2 of SPS adopts a holistic approach in development as it mandates the incorporation of its other cross-cutting policy themes, such as the following:

(i) **Gender and Development (1998)**. It adopts gender mainstreaming as a key strategy for promoting gender equity, and for ensuring that women participate and that their needs are explicitly addressed in the decision-making process for development activities;

(ii) **Public Communications Policy (2011)**. It seeks the active participation of affected people and other stakeholders during the development and review of safeguard policies on ADB-assisted programs and projects, consistent with ADB's OM Section F1/OP (March 2010); and

(iii) **Accountability Mechanism Policy (2012)**. It is part of ADB's continued efforts to enhance its capacity in responding to and/or resolving the problems associated with the implementation of its policies in all programs or projects it assists. It consists of a consultation phase and a compliance review phase, by which the problems or issues raised by the affected people and/or stakeholders are investigated and resolved.

C. Gap Analysis and Reconciliation of Laws and Policies

14. In the design of compensation and entitlements of affected persons or households, consideration was given to the resettlement policies of the Philippine Government and that of ADB. The policies are shown in **Table 16.2** citing comparison, applicability and reconciliation in order to address the gaps in this Project.

Table 16.2: Comparison and Reconciliation of Applicable Philippine Laws, ADB's Safeguard Policy Statement 2009 and WDDSP Project Policy

Key Issues	Philippine Laws/ Policies	ADB Policy	WDDSP Project Policy
<p>1. Non-titled land users, caretakers/tenants of land, sub-leased space not covered by contracts between and among the owners of land, and informal settlers of private government property, including community facilities.</p>	<p>Philippine Constitution, Article XIII, Section 10: Urban or rural poor dwellers shall not be evicted nor their dwellings demolished, except in accordance with the law and in a just humane manner. Focus is on urban poor as per UDHA. Limited assistance or protection is given to rural poor unless they are tenured agricultural underclass. The law is not very clear on assistance to small enterprises, renters.</p>	<p>Non-titled affected persons (APs) are not entitled to compensation of land but APs including renters, informal settlers/squatters are entitled to payment for non-land assets and assistance to restore their pre-project living conditions. If they are poor and vulnerable, appropriate assistance must be provided to help them improve their socio-economic status.</p>	<p>Non-titled APs are not entitled to compensation of land but APs including renters, informal settlers/squatters are entitled to payment for non-land assets and assistance to restore their pre-project living conditions. If they are poor and vulnerable, appropriate assistance must be provided to help them improve their socio-economic status. If government infrastructure is affected, owners are consulted and compensation and replacement will be provided.</p>
<p>2. Compensation for land, commercial structures, residential and income-generating spaces with attached mixed-use structures, crops and trees.</p>	<p>Republic Act (RA) No. 8974, Sections 8, 9, 10 and 13 provides compensation of affected properties based on fair market value. Executive Order (EO) 1035 (1985) provides for the procedures and guidelines for the expeditious acquisition of properties and rights by the Philippine Government for infrastructure and other government projects.</p>	<p>All compensation will be based on the principle of replacement cost.</p>	<p>All compensation will be based on the principle of replacement cost.</p>
<p>3. Provision of rehabilitation assistance to displaced households and vulnerable groups</p>	<p>Income restoration/ rehabilitation assistance is available only to resettled families and beneficiaries of socialized housing.</p>	<p>All eligible APs including tenants, employees of affected businesses who stand to lose their jobs, incomes or livelihoods because of project</p>	<p>Rehabilitation assistance will be provided to those who lose 10% or more of their income generating assets and/or are physically displaced.</p>

Key Issues	Philippine Laws/ Policies	ADB Policy	WDDSP Project Policy
	<p>The Philippines has laws protecting women, elderly and children, persons with disabilities, and indigenous peoples. However, the issue is proper implementation and attention given to these groups based on resettlement impacts.</p>	<p>impacts are entitled to receive one-time financial assistance to cover losses of the move, as well as economic and social rehabilitation.</p> <p>Measures to address the status of the poor and vulnerable should focus on strategies to avoid their future impoverishment and create new opportunities for them.</p>	<p>Strategies to create new opportunities to improve incomes of poor and vulnerable people to avoid further impoverishment will be developed.</p> <p>The project will provide additional assistance on a case to case basis depending on the type of vulnerability identified. This assistance will be included in each RP.</p>

III. PROJECT PRINCIPLES

15. The Project's Resettlement Framework (RF) and entitlements have been built upon the laws of the Government of Philippines, principally the Philippine Constitution that provides basic principles of water resources development and management, which stipulate that all waters of the Philippines belong to the state and applicable laws and regulations covering land acquisition, resettlement and compensation of land and structures, and the SPS. Whenever a gap exists, ADB's Policy on Involuntary Resettlement will prevail. The basic project principles of the RF are as follows:

- (i) The acquisition of land and other assets and the relocation of APs will be minimized as much as possible by exploring all viable options.
- (ii) All compensation will be based on the principle of replacement cost.
- (iii) Rehabilitation assistance will be provided to severely affected people and other vulnerable groups to assist them to improve or at least restore their pre-project living standards, incomes and productive capacity.
- (iv) Particular attention will be paid to the needs of the poorest people and vulnerable groups that may be at high risk of impoverishment. This may include those without legal title to land or other assets, landless households, households headed by females, the elderly or disabled and other vulnerable groups. Appropriate assistance must be provided to help them improve their socio-economic status.
- (v) Lack of legal title to affected assets is not a bar to compensation and assistance.
- (vi) In case of the relocation of APs, replacement houses and/or agricultural land will be located as close as possible to the assets that were lost, and at locations acceptable to the APs.
- (vii) Efforts shall be made to maintain, to the extent possible, the existing social and cultural institutions of the resettled people and host communities.
- (viii) APs will be fully informed and closely consulted and will participate in the preparation and implementation of the RP for each subproject. The comments and suggestions of APs and communities will be taken into account during the design and implementation phases of resettlement activities.
- (ix) Adequate resources will be identified and committed during resettlement planning for each subproject and the overall Project. This includes adequate budgetary support, fully committed, for each subproject and made available to cover the costs of land acquisition, compensation, resettlement and rehabilitation within the agreed implementation period for the subproject; and adequate human resources for supervision, liaison and monitoring of land acquisition, resettlement and rehabilitation activities.
- (x) Appropriate reporting, internal and external monitoring and evaluation mechanisms will be identified and set in place as part of the resettlement management system.

(xi) Key information in each RP will be translated into Filipino or, where necessary, the local language and placed in the WD's offices for the reference of APs as well as other interested groups.

(xii) ADB shall not approve any award of civil works contract for any subproject to be financed from the loan proceeds unless following detailed design and based on detailed measurement survey (DMS), the RP has been submitted to and approved by ADB.

IV. THE PROJECT ENTITLEMENTS

16. The EA through its Project Management Unit (PMU) and the WDs as the IA/sub-borrowers through their respective Project Implementation Units (PIUs) for the infrastructure investment covered under the Project, will ensure that the RP activities of any subproject submitted for funding under the sector loan are conducted in accordance with ADB's Policy on Involuntary Resettlement and the Philippine Government's applicable laws and regulations.

- **Cut-off Date.** All APs who are identified in the subprojects sites on the cut-off date will be entitled to compensation for their affected assets and rehabilitation measures adequate to assist APs to improve or at least maintain their pre-project income-earning capacity, production levels, and living standards. The cut-off date will be the first day of the census in each subproject site conducted during project feasibility stage. Those who enter in the subproject site illegally after the cut-off date will not be entitled to compensation or any form of subproject assistance.
- **Potential Impacts and Entitlements.** Table 16.3 provides the types of losses and corresponding nature and scope of entitlements. However, this matrix may not cover all resettlement impacts and/or losses specific and particular to each subproject. The DMS will be the basis for the determining the final entitlements based on the actual impact and/or losses, appropriate project assistance, relocation and, special assistance to poor and vulnerable groups during the preparation of the RP. A replacement cost survey will be carried out to determine the actual replacement costs and rates.
- **Donation.** Where individuals opt to make voluntary contribution of affected land, this will be acceptable only with the following safeguards in place: (i) full consultation with APs on project entitlements with consultations conducted in a free and transparent manner, (ii) ensuring that voluntary contributions do not severely affect living standards of households and are linked directly to benefits for the AP, (iii) any voluntary contribution will be confirmed through verbal or written record and verified by an independent third party (such as representative of a peoples' organization, NGO or legal authority), (iv) adequate grievance redress mechanisms are in place, (v) land and non-land assets contributed do not belong to the poorest and most vulnerable households, (vi) the land is free from any legal disputes or controversies, and (vii) land transactions are supported by transfer of titles.

Table 16.3: Project Entitlement Matrix

Item	Type of Loss	Application	Entitled Persons	Compensation Policy	Implementation Issues
1a	Permanent loss of land	Agricultural/residential/commercial land/vacant plot	APs listed in the survey. with proof of ownership/claim to the land.	<p>Compensation for entire loss of land (i.e., the whole land is affected by the Project, or the residual unaffected portion is no longer viable for continued use and, therefore, the entire land will be acquired by the Project) and partial loss (i.e., only a portion of the land of the AH is acquired by the Project and the residual unaffected portion still viable for continued use or meets the expected yield) is based on the principle of replacement cost which is the method of valuing assets to replace the loss at prevailing market value, plus any transaction costs such as administrative charges, taxes, registration and titling costs.</p> <p>If AH is found to be severely affected (i.e., the loss is equivalent to 10% or more of their total income capacity or they are physically displaced from housing or place of business), the AH will be provided additional assistance as discussed under item 4 (severe impacts) of this entitlement matrix.</p>	<p>Computation of valuation of land must be transparent and explained to the entitled persons</p> <p>If there are grievances in valuation, entitled persons must be informed of the grievance mechanism</p>
1b	Permanent loss of land	Agricultural/residential/commercial land/vacant plot	APs without proof of ownership/claim to the land they occupy.	<p>Not entitled to payment for land, but will be compensated for non-land assets (structures, crops, trees, etc) at replacement cost.</p> <p>Entitled to cash or in-kind assistance if severely affected.</p>	<p>List of non-land assets to be compensated must be signed off by entitled persons</p> <p>Vulnerable and severely affected persons to be identified during census</p>

Item	Type of Loss	Application	Entitled Persons	Compensation Policy	Implementation Issues
1c	Permanent loss of land	Agricultural/residential/commercial land/vacant plot	Tenants/shareholders	Entitled to compensation for non-land assets (structures, crops, trees) at replacement cost. Entitled to cash or in-kind assistance if severely affected.	List of non-land assets to be compensated must be signed off by entitled persons Vulnerable and severely affected persons to be identified during census
2	Permanent full or partial loss of structures or income-generating spaces	Residential/commercial/institutional structures and income-generating spaces	AP owners located at the site during the cut-off date of the survey, regardless of tenure and status (i.e., owners, renters, sharers, caretakers)	<p>Compensation for permanent houses and other structures affected either in full (i.e., entire main structure is affected, or the unaffected portion of the main structure is no longer viable for continued use), or in part (i.e., only a portion of the main structure of the house, house-and-store, or shop is affected and the remaining unaffected portion is still viable for use), will be determined according to replacement value for materials and labor to rebuild similar structures, at prevailing market prices in the locality.</p> <p>In determining replacement costs, depreciation of assets and salvage value of materials will not be taken into account.</p> <p>In determining compensation for movable structures including houses, where the structures can be moved easily, transfer, relocation and repair allowances will be calculated. An assessment of material replacement will be made, based on the condition of materials, with valuations calculated based on standard replacement and restoration costs.</p> <p>Provision of transition and moving allowance/assistance (cash or in-kind) for</p>	List of structures to be compensated must be signed off by entitled persons Computation of the valuation of affected structures must be explained to entitled persons If there are grievances in valuation, entitled persons must be informed of the grievance mechanism

Item	Type of Loss	Application	Entitled Persons	Compensation Policy	Implementation Issues
				APs that opt for voluntary relocation.	
3	Permanent loss of crops and trees	All trees of any age, crops	All APs regardless of tenure status	Cash compensation equivalent to (i) for annual standing crops, prevailing market value of crops; (ii) for perennial crops, prevailing market value given the type, age and productive value; and (iii) for trees, the productive value or the annual production as determined by the municipal agriculturist multiplied by the estimated number of productive years; all at the time of compensation. 60 days notice to allow owners to harvest any standing crops	List of trees and crops to be compensated must be signed off by entitled persons Computation of the valuation of trees and crops must be explained to entitled persons
4	Severe impacts (more than 10% of productive income affected) on productive assets	Land-based income, income from trees and crops, income from business	All APs losing 10% or more of their productive income from business and other income-generating assets. regardless of tenure status	Compensation for lost income based on actual impacts as a result of DMS. Appropriate rehabilitation measures and income restoration programs Project assistance for affected households such as job referral and placements and assistance to be trained additional skills for local employment or income-generating ventures. Additional project assistance (cash or in-kind) to poor and vulnerable households will be provided	Severely impacted (more than 10% impacted) households to be identified during census
5	Temporary loss/impact on assets during construction	Residential structures, improvements and other physical assets affected during	APs with improvements of their residential or business structure (e.g. fences, driveways)	Cash or in-kind compensation for fixed and movable assets such as houses, pavements, fences community facilities, farm structures for animals and farmers at replacement cost. Restoration or replacement of a fixed asset one month after construction of water transmission and distribution lines,	List of affected structures to be signed off by entitled persons Schedule construction activities to minimize the period of disruption Computation of the compensation must be explained to entitled persons

Item	Type of Loss	Application	Entitled Persons	Compensation Policy	Implementation Issues
		construction	and other physical assets on lots to be traversed by transmission pipes	sanitation facilities, reservoirs and other water facilities. Compensation for residential structures and community facilities, lost in full or part	
6	Temporary loss of income	Income from livelihood, business or employment	APs with businesses or employment disrupted during construction	Compensation for lost income or wages calculated at prevailing and/or average historical rate multiplied by the number of days of disruption	APs and corresponding income losses per day to be identified during census
7	Temporary loss/impact on access	Roads, pathways and access routes used by APs to conduct economic, social or cultural activities	APs whose access to land or facilities will be affected during construction	Alternative access routes shall be provided to temporarily replace the affected route.	Convincing owners of land to provide temporary access on their land
8	Any unanticipated impacts/losses		APs entitled to compensation as per RF	Any unanticipated impact or loss will be mitigated as per WDDSP RF	Close monitoring of unanticipated impacts during implementation phase

V. SCREENING AND PREPARATION OF RESETTLEMENT PLANS

A. Screening

17. Resettlement screening for all subprojects will take place during the identification and selection process for funding by the Project. The EA with the assistance of a social development specialist for resettlement will determine impacts and prepare RPs based on the ADB's and Philippine Government's safeguards requirements on involuntary resettlement. Assessment of project impact such as physical displacement, loss in productive and income assets, gender, ethnicity and vulnerability impact will be appraised, and measures to mitigate them will be included in the RPs.

B. Resettlement Plan Preparation

18. If resettlement impacts cannot be avoided for a subproject, the preparation of an RP is required. Preparation of an RP follows the procedures below:

- (i) Carry out a census of all the APs;
- (ii) Undertake DMS⁶ of all losses of all APs. At the same time, inform potential APs (without discrimination) of the subproject, its likely impacts, and principles and entitlements as per the RF;
- (iii) Conduct a socio-economic survey (SES)⁷ of at least 10% of all affected households, and 100% of severely affected households;
- (iv) Carry out replacement cost (valuation) survey for various types of affected assets as a basis for determining compensation rates at replacement cost. Identify losses in accordance with the entitlement matrix⁸;
- (v) Provide project and resettlement information to all affected in a form and language that are easy to understand, and closely consult with them on compensation and resettlement options, including relocation sites and economic rehabilitation;
- (vi) A draft RP will be prepared with an implementation schedule that harmonizes with the project schedule, a budget, procedures for grievance mechanism and monitoring and evaluation;
- (vii) Public consultation to be conducted throughout the project cycle.

C. Surveys for Resettlement Plan Preparation

19. **Socio-economic Survey (SES).** Apart from the basic socioeconomic information⁹ on APs that will be collected as part of the Inventory of Loss survey (IOL), a separate SES will be carried out to collect detailed socioeconomic information from 10% of marginally affected APs and 100% of severely affected APs, disaggregated by gender. The purpose of the SES is to provide baseline data on APs or households to assess resettlement impacts and design rehabilitation measures, and to be used for resettlement monitoring. The scope of data to be collected via the SES includes:

⁶ Data will be gender and ethnic minorities disaggregated.

⁷ It will include gender analysis and data will be gender and indigenous peoples disaggregated.

⁸ If there are new categories of APs and or losses identified during the DMS (aside from those described in the entitlement matrix), the entitlement will be revised in accordance with ADB's policy and guidelines.

⁹ Including AP civil status, gender, age, household size, monthly household income from different sources, tenure status over affected assets.

- (i) Names and basic information about the households (civil status and gender, information on women-headed households, elderly members, number of family members, their education levels, etc.);
- (ii) housing, institutional, commercial/selling spaces and security of tenure that denotes status of ownership, type of real property and their location;
- (iii) economic profile of the households which indicates monthly incomes and expenses, information on savings, assets owned, and borrowings;
- (iv) health, water and sanitation;
- (v) access to basic services and facilities;
- (vi) social networks as in membership in associations, types and projects of the associations, as registered voter(s) of the community, and type of assistance extended by the neighborhood;
- (vii) risks and vulnerabilities (pertaining to environmental risks, calamities, impoverishment brought about by relocation, social exclusion by being very poor, and households headed by women, elderly, disabled, etc.), peace and order and discrimination experience in the community, in which all data collected will be disaggregated for gender.

20. **Assets Inventory.** An inventory of assets or losses survey (IOL) is needed to collect data on the affected assets from 100% of APs during the project preparatory stage. If data available is based on the preliminary design, the data will be finalized during the DMS following the completion of detailed engineering design. Data collected during the DMS will constitute the formal basis for determining AP entitlements and levels of compensation and project assistance. An updated RP will be prepared and implemented prior to commencement of civil works. A list of APs resulting from the DMS will be kept by the WD. For each AP, the scope of the data will include:

- (i) Total and affected areas of land, by type of land assets;
- (ii) Total and affected areas of structures, by type of structure (main or secondary);
- (iii) Legal status of affected land and structure assets, and duration of tenure and ownership;
- (iv) Quantity and types of affected crops and trees;
- (v) Quantity of other losses, e.g., business or other income, jobs or other productive assets;
- (vi) Quantity/area of affected common property, community or public assets, by type;
- (vii) Computed replacement cost of affected assets, i.e., land, structures and improvements, income from business, crops and trees, etc.;

- (viii) Ethnicity, gender of head of household, household size, primary and secondary source of household income, income of household headed by women, elderly or disabled;
- (ix) Whether the affected land for acquisition is primary source of income;
- (x) The AP's project information and/or knowledge of the subproject and preferences for compensation (cash or in-kind) as long as it is comparable to pre-project conditions and, as required provisions of relocation sites with comparable facilities and access to income sources and the provision of rehabilitation measures are in place.

21. **Replacement Cost (Valuation) Survey.** LWUA can also engage the services of a qualified private appraiser to carry out replacement cost surveys for land and non-land assets.

VI. CONSULTATION, GRIEVANCES REDRESS, AND DISCLOSURE

A. Consultation and Participation

22. The participatory and consultative process for the RP preparation will emphasize community participation aimed at increasing opportunities for both men and women to take active roles and responsibilities, harness their capacities and resources in planning, implementation and monitoring in all stages of the RP process such as in DMS, site identification, entitlement allocation, monitoring of impact and benefits, discussion and settlements of grievances and participation in meetings, and discussions pertinent to the subproject components. Information to be discussed with the community will include the (i) description and general schedule of the subproject; (ii) the DMS results; (iii) policy principles, and entitlements and special provisions; (iv) grievance procedures; (iv) the period for payments and displacement schedules; and (v) institutional responsibilities.

B. Grievance Redress

23. LWUA will create a Water District Grievance Redress Committee (WDGRC which will also handle resettlement) in each WD to determine qualified APs and safeguard their rights. The WDRC will be composed of the WD-PIU head as chair, concerned NGOs, barangay officials and households headed by women as members.

24. The Project's grievance redress mechanism shall in no way impede access to the formal legal system or the courts. The decision of the courts is for finality of case resolution. Below are the steps to be followed in filing grievances and the procedures for redress.

Step 1: The complainant provides the background and files the grievance/complaint verbally or in writing to the WDRC. If unwritten, the WDRC Secretary will put it in writing and will reproduce it in four copies for distribution; the original copy to WDRC; two for the WD-PIU; and one for the file of the complainant. The complainant, WDRC and representatives of PIU will meet to discuss the complaint and resolve it within 15 days.

Step 2: If no resolution or understanding is reached, the complainant files the grievance/complaint to the WDRC central desk at the PMU for it to be resolved within 15 days after filing. The written complaint shall be reproduced in four copies; the original to EA-PMU, two for WD-PIU, and one for the file of the complainant.

Step 3: Again, if no resolution or understanding is reached and if the grievance/complaint qualifies for hearing at the Municipal Trial Court (MTC) or Regional Trial Court (RTC), the household may request for assistance of the *pro bono* lawyer from the Public Attorney's office, through the WDRC. The *pro bono* lawyer shall assist the household in reproducing the formal complaint in five copies to be distributed as follows: the original to the appropriate court, one each for PMU, PIU, WDRC and for the file of the complainant.

Step 4: The MTC or RTC assesses the merit of the grievance/complaint, schedules the hearing and renders a decision. Appeals can be elevated to the high court. The Supreme Court's decision is final and executory.

Aggrieved parties may also inform the Office of Special Project Facilitators (OSPF) of the ADB of any project-related grievances.

APs will be exempted from all administrative and legal fees.

25. Unresolved grievance can be elevated to the proper courts. However, resorting to courts prior to availment of this complaint and grievance process will make the appellant's action dismissible, on the ground of non-exhaustion of administrative remedies. The WDRC will maintain a full record of all complaints and grievances received, and the actions taken.

C. Disclosure

26. As per ADB's Public Communications Policy (2012) and the Safeguard Policy Statement, 2009 (SPS), the EA (LWUA) and each IA (each WD) will disclose to the APs the draft RP and following detailed technical design and DMS or change in scope of the subproject, the updated RP. The RP will be uploaded on the EA's and ADB's websites. It will also be uploaded on the IA/WD's website, if it has one, or posted in a public place in the IA/WD's office.

27. Information from the RP for disclosure to APs includes: (i) compensation, entitlement, relocation and rehabilitation options; (ii) the DMS results; (iii) entitlement and special provisions; (iv) grievance procedures; (v) the schedule of payments/replacements of losses; and (vi) relocation and transfer schedule. This information will be made available in leaflets or brochures to APs at the WD's offices and the public information bulletin in Filipino or a language that is easy to understand in the locality where the subproject is situated.

VII. RELOCATION AND INCOME RESTORATION STRATEGY

28. The relocation and income restoration strategy will be designed with the APs during the preparation of the RP. No AP will be displaced until they are fully compensated and provided with project assistance and entitlements. APs will be provided with temporary or permanent place of land, residence (if needed), cash or in-kind assistance during disturbance or transition, and space for mixed-use (income and residence) within the vicinity of the subproject.

VIII. VULNERABILITY, GENDER AND ETHNICITY

29. This RF acknowledges that specific social groups may be less able to restore their living conditions, livelihoods and income levels; and may be at greater risk of impoverishment when their land and other assets are affected. The Project will identify any specific needs or concerns that need to be considered for ethnic minorities and other vulnerable groups such as landless, poor, and households headed by women, disabled, elderly or children without means of support.

A strategy with specific actions addressing gender and ethnicity needs, as required, will be included in each RP.

IX. INSTITUTIONAL ARRANGEMENTS

30. The overall responsibility for enforcing the RF, including RP preparation and implementation is with LWUA and the WDs. The PMU at LWUA will review and endorse the RPs to ensure compliance with the RF prior to ADB's approval. The PMU is responsible for the overall monitoring of the RPs of all subprojects. It will be assisted by project implementation consultants.

31. At the WD level, a PIU will be established and will be responsible for the preparation, updating and implementation of the RP. A resettlement focal person within the PIU will ensure that the social safeguards policies contained in the RF/RP are adhered to. The PIU will be responsible for (i) ensuring that sustained efforts will be made to enhance community relationships in the conduct of resettlement activities such as the DMS, physical design development and technical verifications, and the disclosure, preparation and implementation of income restoration program, (ii) timely delivery of compensation and entitlement to all APs, (iii) acting as grievance officers, and (iv) preparing quarterly resettlement progress reports.

X. MONITORING AND EVALUATION

32. Monitoring and evaluation of the RP implementation assesses the degree to which the resettlement activities have achieved the resettlement objectives. In harmony with the civil works schedule, it allows the proponent to assess its accomplishments against their desired outcomes. Specifically, monitoring defines the RP's progress and provides helpful information in assessing the following critical milestones in the RP: (i) compliance with the RF and RP; (ii) the availability of resources and efficient, effective use of these resources to implement resettlement activities in accordance with the implementation schedule; (iii) the establishment of a well-functioning resettlement unit during the course of project implementation; and (iv) identification of problems, if any, and corrective actions.

33. The PMU will develop internal monitoring indicators, procedures and reporting requirements for all subprojects. Periodic reports will be submitted by the PIU to the PMU and ADB. Reports will include: (i) the status of payment of compensation and provision of assistance to APs in accordance with the approved RP; (ii) coordination and completion of compensation and, as required, resettlement activities and commencement of civil works; (iii) adherence to public information dissemination and consultation procedures, and report on activities; and (iv) adherence to grievance redress procedures, and (v) an account of project activities.

34. The subprojects of the two pilot WDs (CKWD and MSFWD) have limited impacts and will thus not require external monitoring. For subsequent subprojects that are category B with limited impacts, external monitoring is a good practice but is not a requirement as per SPS. However, should the EA decide to engage an independent agency to conduct external monitoring, this will aim to ensure that provisions in the compensation and project assistance indicated in the RP are adhered to accordingly. External monitors, when engaged by the Project, will submit periodic monitoring reports. **Table 16.4** discusses the types of indicators and information required in the conduct of external monitoring and evaluation.

Table 16.4: Indicators for External Monitoring

Type of Indicators	Indicators	Information Required in Monitoring and Evaluation
Input Indicators	Staffing	<ul style="list-style-type: none"> • Number of WD staff assigned for RP implementation. • Number of Social Development and Resettlement Specialist(s) assigned by the PMU.
Process Indicators	Consultation, Participation, and Grievances Resolution	<ul style="list-style-type: none"> • Number of consultations and participation programs held with APs and various stakeholders. • PIBs distributed to APs. • Number and types of grievances received from APs and the number of days consumed by concerned GRCs in resolving them. • Number and names of representatives of community and APs who participated in the consultations and in RP implementation. • Reporting and feedback mechanism in place.
	Operational Procedures	<ul style="list-style-type: none"> • Types of forms used in recording the activities undertaken in RP implementation. • Type of database being maintained. • Adequacy of logistical support for implementing the RP; • Assess if the project policies in RP have adequately been complied with.
	Issues and Problems Encountered	<ul style="list-style-type: none"> • Indicate the issues and problems encountered in staffing, during consultations and grievances resolution, and in the execution of operational procedures. • Indicate number of consultations conducted to resolve issues and problems pertinent to compliance by the WD with the provisions of the RP.
Output Indicators	Compensation and Entitlement	<ul style="list-style-type: none"> • Indicate if the APs who are engaged in micro business that were affected were compensated for their temporary loss of business incomes due to project construction. • Indicate recorded disbursements to and acceptance of APs of their entitlement.

XI. IMPLEMENTATION SCHEDULE AND BUDGET

35. All costs relating to RP implementation are part of the subproject budget. Land acquisition, compensation for non-land assets, project assistance, subproject administration, monitoring, including contingencies will be funded by the WD. Subprojects with significant impacts will engage an external monitor.

36. The PMU will ensure the timely delivery of budget for the implementation of resettlement activities. All compensation and payments for land and non-land assets and assistance will be prepared by the PIU and the finance office of the WD. A compensation schedule chart approved by the WD will be undertaken before the project construction. Procedures for funds disbursement to APs will follow the new accounting rules and regulations of the Philippine

Government. The PIU in coordination with the budget and finance office of the WD will process the necessary documents for payments and compensation stipulated in the RP. Land acquisition, compensation and relocation of affected households cannot commence until the RP has been reviewed and approved by ADB. The PMU will allow construction activities in specific sites after all resettlement activities have been satisfactorily completed for that specific site, agreed compensation, project assistance, rehabilitation assistance is in place, and the site is free of all encumbrances.

ANNEX 1

SAMPLE TERMS OF REFERENCE FOR SOCIAL DEVELOPMENT AND RESETTLEMENT SPECIALIST AS PART OF PROJECT IMPLEMENTATION SUPPORT SERVICES

A. Project Background

1. The Water District Development Sector Project (the Project) will provide financing for improving water supply and sanitation services of water districts (WDs) in the Philippines. A feasibility study to prepare the Project has been undertaken, including documents on social safeguards to comply with ADB's financing requirements, among them the Resettlement Framework (RF) and the subproject Resettlement Plan (RP) for a pilot WD, Metro San Fernando Water District (MSFWD).

B. Objectives of the Consulting Services

2. The consulting services will support the Project by providing project implementation support on resettlement issues in the implementation of the Project. The services include support to the Local Water Utilities Administration (LWUA) and the WDs for conducting the Detailed Measurement Survey (DMS), updating and implementation of MWSFWD's RP based on the detailed engineering design, and preparing RPs for other subprojects to be funded under the sector loan.

3. The services will be provided to the staff of the Project Management Unit (PMU) to be established in LWUA, and to the staff of the Project Implementation Units (PIUs) of the implementing agencies (the participating WDs).

4. One national social development and resettlement consultant will be hired to provide project implementation support. They will be attached to the PMU to ensure that all work is carried out in accordance with the RF, which is in accordance with the SPS and national laws on resettlement. The consultant will bring management and technical experience and proven methods from other projects to complement and build upon the EA's knowledge of project context and implementation experience in the Philippines. The consultant will have a minimum of 8 years experience in resettlement.

C. Scope of Work - Social Development and Resettlement Specialist (National, 4 person-months)

5. The expert will:
- a. Ensure all RPs and IPPs for all subprojects are in line with the RF and IPPF, which reflects both national regulations and the SPS.
 - b. Prepare RPs and IPPs in accordance with RF and IPPF; review and update MSFWD's RP and inventory of losses following detailed design, including (i) identification of affected assets and affected households, (ii) replacement cost of affected assets, and (iii) cost of affected trees and crops.
 - c. Assist PMU and WDs conduct necessary surveys and consultations with stakeholders, information campaigns and community participation; conduct follow-up

consultations as necessary with affected households to disclose project-related information including updated RPs and IPPs and grievance redress mechanism procedures.

- d. Assist PMU and WDs with consultations and finalization of RPs and IPPs, as necessary during implementation, based on detailed design to reflect changes in impacts, mitigation measures, costs and monitoring plans including new compensation rates, updated budget and implementation schedules, as required; update RPs and IPPs as per detailed design and reassess all impacts case by case at the time of census update during the DMS.
- e. Assist PMU in conducting public consultations, information campaigns and community participation.
- f. Support PMU in ensuring that work carried out under RF and IPPF is in accordance with the SPS and national laws on resettlement and indigenous people: (i) Review institutional arrangements for RP and IPP implementation, assess adequacy of personnel and budget; (ii) Review PMU's and each PIU's internal monitoring system for RP and IPP implementation and internal monitoring reports, and recommend measures for enhancement; (iii) Provide necessary support and capacity building to PMU/EA and each PIU/WD for RP and IPP preparation and implementation, including orientation and training on RP and IPP activities and implementation mechanisms.
- g. Review and reconfirm entitlement matrix and make necessary adjustments acceptable to the government and ADB.
- h. Undertake due diligence assessment and prepare corrective action plans to identify permanent and temporary socio-economic impacts resulting from land acquisition, changes in land use or restrictions of access to assets and common property resources, and handle grievance and redress cases.
- i. Define categories of impact and eligibility of affected households for compensation, and prepare entitlement matrix covering compensation for lost assets and income including assistance to achieve full replacement costs for lost assets, income and livelihoods.
- j. Assist PMU monitor implementation of both involuntary resettlement and IP safeguards in accordance with updated and approved RPs and IPPs with a focus on community consultation, compensation assessment, and grievance procedures.
- k. Assist PMU engage the services of a qualified private appraiser to carry out replacement cost surveys for land and non-land assets.
- l. Assist PMU with monitoring and liaising with the external monitoring consultant as required and assist in RP and IPP monitoring and reporting formats.
- m. Work closely with local authorities and resettlement committees at all levels on resettlement-related activities and assist PMU obtain local and national clearances and approvals for RPs and IPPs.

- n. Establish and implement liaison mechanisms to ensure proper technical and logistical support between PMU, PIUs, local administrative authorities, resettlement committees and concerned government departments.
- o. Review the operation and appropriateness of the grievance redress mechanism; identify issues, if any, and advise measures if necessary for speedy resolution.
- p. Review and update the Consultation and Participation Plan including (i) the identification of key stakeholders; and (ii) key activities and their respective objectives.
- q. Assist WDs in the implementation of the Consultation and Participation Plan, including (i) identification of barriers to participation and measures to overcome or resolve them; and (ii) identification of performance gaps and measures to address them.

Indigenous Peoples Planning Framework

March 2014

Republic of the Philippines: Water District
Development Sector Project

Prepared by Local Water and Utilities Administration for the Asian Development Bank.

CURRENCY EQUIVALENTS

(as of 19 March 2014)

Currency unit	–	Philippine peso (Php)
Php1.00	=	\$0.0224074572
\$1.00	=	Php 44.63

ABBREVIATIONS

ADB	–	Asian Development Bank
AH	–	affected household
AP	–	affected person
EA	–	executing agency
EMA	–	external monitoring agency
GAD	–	gender and development
GAP	–	gender action plan
HH	–	Household
IA	–	Implementing Agency
IOL	–	Inventory of losses
IP	–	Indigenous Peoples
IPP	–	Indigenous Peoples Plan
LGU	–	Local Government Unit
LWUA	–	Local Water and Utilities Administration
m ³	–	cubic meter
MSFWD	–	Metro San Fernando (La Union) Water District
NEDA	–	National Economic and Development Authority
PIB	–	public information booklet
PIU	–	project implementation unit
PMU	–	project management unit
PPTA	–	project preparatory technical assistance
RF	–	Resettlement Framework
RP	–	Resettlement Plan
SES	–	Socio economic Survey
SPS	–	ADB's Safeguard Policy Statement (2009)
WD	–	Water District
WDGRC	–	Water District Grievance Redress Committee

GLOSSARY

- Ancestral Domain Sustainable Development & Protection Plan (ADSDPP)** – Consolidation of plans of Indigenous Peoples (IPs)/Indigenous Cultural Communities (ICCs) within an ancestral domain for the sustainable management and development of their land and natural resources as well as the development of human and cultural resources based on their indigenous knowledge systems and practices.
- Affected People (APs)** – includes any person, entity or organization affected by the Project, who, on account of the involuntary acquisition of assets in support of the implementation of the Project, would have their (i) standard of living adversely affected; (ii) right, title or interest in all or any part of a house and buildings, pavements and other physical improvements, land (including residential, commercial, agricultural, plantations, forest and grazing land), water resources, annual or perennial crops and trees, or any other moveable or fixed assets acquired or possessed, in full or in part, permanently or temporarily; and (iii) business, profession, work or source of income and livelihood lost, partly or totally, permanently or temporarily.
- Ancestral Domain** – Areas generally belonging to IPs comprising lands, inland waters, coastal areas, and natural resources therein, held under a claim of ownership, occupied or possessed by the IPs, by themselves or through their ancestors, communally or individually since time immemorial, continuously to the present except when interrupted by war, force majeure or displacement by force, deceit, stealth or as a consequence of government projects or any other voluntary dealings entered into by government and private individuals/corporations, and which are necessary to ensure their economic, social and cultural welfare. It will include ancestral lands, forests, pasture, residential, agricultural, and other lands individually owned whether alienable and disposable or otherwise, hunting grounds, burial grounds, worship areas, bodies of water, mineral and other natural resources, and lands which may no longer be exclusively occupied by IPs but from which they traditionally had access to for their subsistence and traditional activities, particularly the home ranges of IPs who are still nomadic and/or shifting cultivators.
- Ancestral Land** – Land occupied, possessed and utilized by individuals, families and clans who are members of the IPs since time immemorial, by themselves or through their predecessors-in-interest, under claims of individual or traditional group ownership, continuously, to the present except when interrupted by war, force majeure or displacement by force, deceit, stealth, or as a consequence of government projects and other voluntary dealings entered into by government and private individuals/corporations including, but not limited to, residential lots, rice terraces or paddies, private forests, swidden farms and tree lots.
- Certificate of Ancestral Domain Title (CADT)** – A title formally recognizing the rights of possession and ownership of IPs over their ancestral domains identified and delineated in accordance with the Indigenous Peoples Rights Act (IPRA).
- Certificate of Non-Overlap** – A certificate issued by the National Commission on Indigenous Peoples (NCIP) attesting to the fact that the area where a particular

plan, program, project or activity will be done, does not overlap with or affect any ancestral domain.

- Certification Precondition (CP)** – A certificate issued by the NCIP, signed by the Chairperson, attesting to the grant of free and prior informed consent (FPIC) by the concerned IPs/ICCs after appropriate compliance with the requirements provided in this guidelines.
- Free and Prior Informed Consent** – A consensus of all members of an IP community to be determined in accordance with their respective customary laws and practices, free from any external manipulation, interference and coercion, and obtained after fully disclosing the intent and scope of the activity, in a language and process understandable to the community.
- Rehabilitation** – means assistance provided to severely affected APs due to the loss of 10% or more of productive assets (i.e., farmland, crops and trees, vegetable garden, etc.), incomes, and employment, or when sources of living such as shops and places of employment have to be reconstructed completely and/or relocated. The livelihood support may be given in cash or in kind or a combination of the two in order to improve or at least achieve full restoration of living standards to pre-project levels.
- Vulnerable Groups** – are distinct groups of people who might suffer disproportionately or face the risk of being further marginalized by the effects of resettlement and specifically include: (i) households headed by women, the elderly or disabled, (ii) households living below the poverty threshold, (iii) the landless, and (iv) indigenous people and ethnic minorities.

NOTE

In this report, "\$" refers to US dollars.

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I. INTRODUCTION

1. The Water District Development Sector Project (WDDSP) aims to improve health conditions in the proposed service expansion areas through the improvement in the distribution of urban water and sanitation services. The project will be implemented as a sector loan. The Executing Agency (EA) is the Local Water and Utilities Administration (LWUA) while the implementing agencies (IAs) are the local water districts (WD) in the subproject areas.
2. The Asian Development Bank's (ADB) Poverty Reduction Strategy recognizes that indigenous peoples (IPs) may suffer from social exclusion, and lack basic services and social capital, and therefore remain in poverty. As such, they require special support.
3. IPs are accorded protection by the project based on ADB's Policy on Indigenous Peoples as contained in its *Safeguard Policy Statement (2009)* as well as on the country's *Indigenous People's Rights Act of 1997*.
4. The proposed sites for water supply expansion in the franchise area of Metro San Fernando (La Union) Water District and for water supply expansion and for the septage treatment in the franchise area of City of Koronadal Water District (CKWD) being considered for the Project do not have distinct IP groups which may be affected in any way by the proposed infrastructure interventions. Should there be any IPs in other subproject areas to be identified during implementation of the sector loan, an Indigenous Peoples Plan (IPP) shall be prepared in accordance with the Indigenous Peoples Planning Framework (IPPF).

II. OBJECTIVES AND POLICY FRAMEWORK

5. The principles and objectives governing the preparation and implementation of IPPs shall be consistent with applicable Philippine laws and ADB safeguard policies on IPs. They aim to uphold the dignity, rights and well-being of IP communities and their right to participate in decision-making on development projects, programs and plans that affect their rights, lives, and well-being.

A. APPLICABLE PHILIPPINE LAWS ON INDIGENOUS PEOPLES

6. To date, the most comprehensive law recognizing and protecting the rights of IPs in the Philippines is Republic Act 8371 also known as the Indigenous Peoples Rights Act (IPRA) enacted in 1997. Pertinent provisions of the law include:

- a. **Definition of indigenous peoples.** Under the IPRA, the term Indigenous Peoples/Indigenous Cultural Communities (IPs/ICCs) "refers to a group of people or homogenous societies identified by self-ascription and ascription by others, who have continuously lived as an organized community on communally-bounded and defined territory, and who have, under claims of ownership since time immemorial occupied, possessed customs, traditions and other distinctive cultural traits, and who have, through resistance to political, social and cultural inroads of colonization, non-indigenous religions and cultures became historically differentiated from the majority of Filipinos. IPs/ICCs shall likewise include peoples who are regarded as indigenous on account of descent from the populations which inhabited the country at the time of conquest or colonization or at the time of inroads of non-indigenous religions and cultures or the establishment of present state boundaries, who retain some or all of their own social, economic, cultural and political institutions, but

who may have been displaced from their traditional domains or who may have resettled outside their ancestral domains.” (Sec. 3.h)

b. Establishment of the National Commission on Indigenous Peoples (NCIP) and defining its powers and functions. The NCIP “shall be the primary government agency responsible for the formulation and implementation of policies, plans and programs to promote and protect the rights and well-being of the IPs/ICCs and the recognition of their ancestral domains and their rights thereto” (Sec.38). As such, it is mandated to protect and promote the interest and well-being of the IPs/ICCs with due regard to their beliefs, customs, traditions and institutions” (Sec. 39). Among its powers and functions that are pertinent to the WDDSP are: (i) to issue certificates of ancestral land/domain title (sec 44.e); (ii) to enter into contracts, agreements or arrangement with government or private agencies as may be necessary to attain the objectives of the IPRA (Sec. 44.f) (iii) to coordinate development programs and projects for the advancement of IPs/ICCs and to oversee their proper implementation (Sec 44.h); (iv) to issue appropriate certifications as a pre-condition to the grant of permit, lease, grant or any similar authority for the disposition, utilization, management or appropriation by any private individual, corporate entity or government agency on any part or portion of the ancestral domain, taking into consideration the consensus approval of the IPs/ICCs (Sec 44.m).

c. Right to decision-making and participation. The IPRA explicitly upholds the right of IPs/ICCs to “determine and decide priorities for development affecting their lives, beliefs, institutions, spiritual well-being, and the lands they own, occupy or use. They shall participate in the formulation, implementation and evaluation of policies, plans and programs for national, regional and local development which may directly affect them” (Sec. 17). They also have the “right to participate fully, if they so choose, at all levels of decision-making in matters which may affect their rights, lives and destinies through procedures determined by them as well as to maintain and develop their own indigenous political structures (Sec. 16).

d. Free and prior informed consent is defined under IPRA as “the consensus of all members of the IPs/ICCs, to be determined in accordance with their respective customary laws and practices, free from any external manipulation, interference and coercion, and obtained after fully disclosing the intent and scope of the activity in a language and process understandable to the community” (Sec. 3.g).

e. Natural resources within ancestral domains. “The IPs/ICCs shall have the priority rights in the harvesting, extraction, development or exploitation of any natural resources within the ancestral domains” (Sec. 57).

7. Other relevant laws include the following:

8. **The Comprehensive Agrarian Reform Law or CARL (RA 6657)**, which requires the government to apply the principles of agrarian reform, or stewardship, whenever applicable, in the disposition or utilization of other natural resources, including lands of the public domain, and their lease or concession, suitable to agriculture, subject to prior rights of indigenous communities to their ancestral lands.

9. **The Local Government Code of 1991 (RA 7160)** provides IPs with the option to establish tribal barangays as similarly recognized by the IPRA.¹

¹ Section 18 of the IPRA states that IPs “living in contiguous areas or communities where they form the predominant population but which are located in municipalities, provinces, or cities where they do not

10. **The National Integrated Protected Areas System (NIPAS) Act of 1992 (RA 7586)** safeguards protected areas (PAs) from further encroachment. It allows the implementation of development projects with compatible uses, or which enhance the protection of these PAs. It includes specific provisions that protect the rights of IP communities to their ancestral domain.²

11. **The Philippine Mining Act of 1995 (RA 7942)** requires proponents of mining projects in IP areas to secure an IPs' free and prior informed consent.

12. **The Conservation and Protection of Wildlife Resources and their Habitats Act of 2001(RA 9147)** mandates that the collection of wildlife by IPs may be allowed for traditional use and not primarily for trade.³

B. ADB POLICY PRINCIPLES

13. The objective of ADB's Safeguard Policy Statement (2009) and its Policy on Indigenous Peoples is to design and implement projects in a way that fosters full respect for IPs' identity, dignity, human rights, livelihood system, and cultural uniqueness as defined by the IPs themselves so that they (i) receive culturally appropriate social and economic benefits, (ii) do not suffer adverse impacts as a result of project, and (iii) can participate actively in projects that affect them.

14. ADB's Policy on Indigenous Peoples defines "indigenous peoples" in a generic sense to refer to a distinct, vulnerable, social and cultural group possessing the following characteristics in varying degrees: (i) self-identification as members of a distinct indigenous cultural group and recognition of this identity by others; (ii) collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories; (iii) customary cultural, economic, social or political institutions that are separate from those of the dominant society and culture, and (iv) a distinct language, often different from the official language of the country or region. In considering these characteristics, national legislation, customary law, and any international conventions to which the country is a party will be taken into account. A group that has lost collective attachment to geographically distinct habitats or ancestral territories in the project area because of forced severance remains eligible for coverage under this policy.

15. To achieve the above objective, the following principles will be observed:

- a) Screen early on to determine (i) whether IPs are present in, or have collective attachment to, the subproject sites; and (ii) whether subproject impacts on IPs are likely.
- b) Undertake a culturally appropriate and gender-sensitive social impact assessment or use similar methods to assess potential subproject impacts, both positive and adverse, on IPs. Give full consideration to options the affected IPs

constitute the majority of the population, may form or constitute a separate barangay in accordance with the Local Government Code on the creation of tribal barangays"

² Related to this is the Implementing Rules and Regulations (IRR) of Department AO (DAO) 92-25 that states "The zoning of a protected area and its buffer zones and management prescriptions within those zones will not restrict the rights of indigenous communities to pursue traditional and sustainable means of livelihood within their ancestral domain unless they so concur."

³ "Traditional use" means utilization of wildlife by indigenous people in accordance with written or unwritten rules, usage, customs, and practices traditionally observed, accepted and recognized by them.

prefer in relation to the provision of subproject benefits and the design of mitigation measures. Identify social and economic benefits for affected IPs that are culturally appropriate and gender and inter-generationally inclusive and develop measures to avoid, minimize, and/or mitigate adverse impacts on IPs.

- c) Undertake meaningful consultations with affected IP communities and concerned IP organizations to solicit their participation in: (i) designing, implementing and monitoring measures to avoid adverse impacts or when avoidance is not possible, to minimize, mitigate, or compensate for such effects; and (ii) tailoring subproject benefits for affected IP communities in a culturally appropriate manner. To enhance IPs' active participation, subprojects affecting them will provide for culturally appropriate and gender inclusive capacity development and establish a culturally appropriate and gender inclusive grievance mechanism to receive and facilitate resolution of the IPs' concerns.
- d) Ascertain the consent of affected IP communities to the following project activities: (i) commercial development of the cultural resources and knowledge of IPs; (ii) physical displacement from traditional or customary lands; and (iii) commercial development of natural resources within customary lands under use that would impact the livelihoods of the cultural, ceremonial, or spiritual uses that define the identity and community of IPs. For the purposes of policy application, the consent of affected IP communities refers to a collective expression by the affected IP communities, through individuals and/or their recognized representatives, of broad community support for such subproject activities. Broad community support may exist even if some individuals or groups object to the subproject activities.
- e) Avoid, to the maximum extent possible, any restricted access to and physical displacement from protected areas and natural resources. Where avoidance is not possible, ensure that the affected IP communities participate in the design, implementation, and monitoring and evaluation of management arrangements for such areas and natural resources and that the benefits are equitably shared.
- f) Prepare an IPP that is based on the social impact assessment with the assistance of qualified and experienced experts and that draws on indigenous knowledge and participation by the affected IP communities. The IPP should include a framework for continued consultation with the affected IP communities during subproject implementation; specifies measures to ensure that IPs receive culturally appropriate benefits; identifies measures to avoid, minimize, mitigate, or compensate for any adverse subproject impacts; and includes culturally appropriate grievance procedures, monitoring and evaluation arrangements, and a budget and time-bound actions for implementing the planned measures.
- g) Disclose a draft IPP, including documentation of the consultation process and the results of the social impact assessment in a timely manner, before subproject appraisal, in an accessible place and in a form and language(s) understandable to affected IP communities and other stakeholders. The final IPP and its updates should also be disclosed to the affected IP communities and other stakeholders.
- h) Prepare an action plan for legal recognition of customary rights to lands or territories or ancestral domains when the project involves (i) activities that are contingent on establishing legally recognized rights to lands and territories that IPs have traditionally owned or customarily used or occupied, or (ii) involuntary acquisition of such lands.

- i) Monitor implementation of the IPP using qualified and experienced experts; adopt a participatory monitoring approach, wherever possible; and assess whether the IPP's objective and desired outcome have been achieved, taking into account the baseline conditions and the results of IPP monitoring. Disclose monitoring reports.

C. GAP ANALYSIS

16. ADB's policy principles on IPs as outlined above are mostly consistent with the policies and principles found in the IPRA. The WDDSP will adopt ADB's policies as these have more direct and application to the specific circumstances of the Project. A possible gap pertains to the definition of free and prior informed consent (FPIC). Whereas the IPRA defines FPIC as a consensus of all members of the IP community, to be determined in accordance with customary laws and practices, ADB's policy defines consent as a collective expression of broad community support through individuals or recognized representatives. Reconciling the two policies, the WDDSP policy will follow legally mandated procedures for obtaining FPIC as required by IPRA. Consent may be expressed through individuals and/or recognized representatives and will be considered as consent if consensus was obtained through a community process conducted in accordance with customary laws or practices as certified by NCIP and fully documented in the subproject IPP.

D. CRITERIA FOR SELECTING AND SCREENING SUBPROJECTS AND COMPONENTS

17. In selecting and screening project components and subprojects, likely impacts, both positive and negative, on IP groups will be considered. Subprojects and project components that are likely to result in negative impacts for IPs should be avoided. Should any issues be identified and not resolved, then the subproject should be rejected as infeasible unless there are extenuating circumstances that require further action.

18. If certain project components or subprojects with negative impacts are unavoidable in order to bring about greater benefits to the local population, including IP communities or groups, an IPP will be prepared containing the measures to be undertaken to minimize, mitigate and compensate for the negative impacts and ensure that the IP population is not disadvantaged in any way because of the Project, ensure the meaningful and culturally-appropriate participation of the IP groups in the planning and implementation of the subproject, that they are equal beneficiaries of the subproject, and that project benefits are culturally-appropriate.

III. IDENTIFICATION OF AFFECTED INDIGENOUS PEOPLES

19. The presence of some of the following characteristics in varying degrees is used to identify tribal or indigenous communities in the Philippines:

- (i) A close attachment to their ancestral territories and natural resources.
- (ii) Self-identification and identification by others as members of a distinct cultural group.
- (iii) An indigenous language, often different from the national language.
- (iv) The presence of distinct social, cultural and political institutions.
- (v) Primarily subsistence oriented production.

20. The total IP population in the Philippines is approximately 12-15 million. There are about 171 ethnolinguistic groups.⁴ The exact numbers of IP communities which are likely to be affected will be determined for each subproject. Subprojects may potentially affect IP households in ancestral domains, upland barangays and water source communities. There may also be concentrated IP populations or migrant ethnic groups in rural and urban settings. Potential impacts may include restrictions in the use of land and water resources traditionally used by the IP communities or within their ancestral domain, and their exclusion from project benefits if the water source communities are not part of the targeted service areas of the project. Potential positive effects may include the IP communities' increased access to water and sanitation services and provision of livelihood activities that are compatible with watershed enhancement.

21. The initial identification of IPs in a subproject area will be based on population data submitted by the water district (WD) in its initial subproject application. The initial social impact assessment should establish the presence of IPs, if any, and provide an overview of the IP population in terms of territory occupied within the subproject site, to ensure IP participation at the earliest instance.

22. There are no distinct IP groups which may be affected in any way by the proposed infrastructure interventions of the subprojects of the pilot WDs. In the City of Koronadal, there are IPs living in potential water source areas. Two of the most well-known IPs in the City of Koronadal area are the B'laan and the T'boli. They live in the regions between northwestern Koronadal to Lake Sebu (B'laan) and between Lake Sebu to Lake Buluan (T'boli). The T'bolis also inhabit the areas between Lake Buluan and the highlands of Davao City. However, the proposed subproject of CKWD will not be tapping water sources in the areas where there are IP groups. Watershed management is not a component of this subproject.

IV. SOCIAL IMPACT ASSESSMENT AND INDIGENOUS PEOPLES PLAN FOR SUBPROJECTS AND/OR COMPONENTS

23. A social impact assessment, including carrying out a socioeconomic survey (SES) shall be carried out by the implementing agency (IA) with the support of the project implementation consultants. Information gathered through the SES will provide baseline information on IP and/or ethnic minority living conditions and any challenges to their effective participation in the Project, which will be used in the development of specific actions in the IPP to address these concerns and maximize benefits to ethnic minority communities. Outputs of the social impact assessment will include the following:

- a. A review of the legal and institutional framework applicable to IPs in the subproject context.
- b. Baseline information on the demographic, social, cultural and political characteristics of the IP communities, the land and territories they have traditionally owned or customarily used or occupied; and the natural resources on which they depend.
- c. Key project stakeholders and a culturally appropriate and gender-sensitive process for meaningful consultation with IPs at each stage of project preparation and implementation.

⁴ Indigenous Peoples of the Philippines, http://www.adb.org/Documents/Reports/Indigenous_Peoples/PHI/chapter_3.pdf

- d. An assessment, based on meaningful consultation with the affected IP communities, of the potential adverse and positive effects of the project and its components, including a gender sensitive analysis of the specific vulnerabilities of, and risks to, the affected IPs.
- e. A gender-sensitive assessment of the IPs' perceptions about the project and its impact on their social, economic and cultural status.
- f. Measures necessary to avoid, minimize, mitigate and/or compensate for adverse effects, as determined based on meaningful consultation with the affected IP communities.

24. Data sets include population size in relation to total population of franchise area, a profile of the economic activities of the group/s, differences in socioeconomic status between IPs and majority populations, identification of the existing problems in performing economic activities or access to basic services such as water and sanitation, and local government capacity in addressing IP issues, particularly in connection with development projects.

25. Guidelines to be observed in conducting the social impact assessment are as follows:

- IPs shall be represented⁵ in the socio-economic survey that will be conducted. Data will be gathered to identify vulnerable groups, indigenous knowledge systems and practices, and structures that can help improve management of water user groups and natural resources.
- Design activities will include a participatory walk-through with members of the IP community, local government officials and project technical staff. Specific issues that may affect IP group/affected persons will be formally noted at this point.
- The WD will identify the leadership of the IPs, and community consultation(s) will be convened to identify specific concerns related to project design and implementation for both water and sanitation.
- Guidelines for affected IP households/properties shall follow those established under the resettlement framework. Apart from compensation for affected assets, additional measures will be taken to improve their living conditions and not just return them to pre-disturbance status.
- The WD will assess whether IPs have any water access issues and should note whether any of these are due to ethnic factors.
- Indigenous knowledge shall be harnessed with the full participation and consent of the IP communities, including determining water sources and natural environmental flows and determining local products and economic opportunities for livelihood development.

26. A proposed IPP outline is found in Annex C. The IPPs will be submitted to and agreed upon by the Government of the Philippines (through the EA) and ADB.

V. CONSULTATION AND PARTICIPATION

27. WDDSP will adopt a culturally appropriate and participatory approach for IP communities, wherever they are identified to be within a subproject's target areas. IP and/or

⁵ IP coverage in the SES will correspond to the relative proportion of IPs to the general population in the subproject area.

ethnic minority communities, where present in the project areas, will be meaningfully consulted⁶ at each stage of subproject preparation and implementation.

28. The planning process shall include a separate community consultation process for IPs within the target area so that IP interests are fully reflected in the WD's plans. The subproject details and its outputs including potential project impacts and mitigation measures, will be disclosed at IP community level meetings and discussed with community groups through participatory focus groups. Groups to be involved in such consultations include IP leaders, IP organizations, IP women, representatives of traditional councils, and barangay and LGU representatives. Consultations will also be held with the National Commission on Indigenous Peoples (NCIP).

29. Consistent with the principle of social equity and environmental justice, the WD will make provisions to give IPs improved access to water and sanitation. The subproject design will be carried out with the support of IPs and/or those affected by project activities. The WD will ensure participation of IPs in all subproject activities and their equal participation in training programs (e.g. sanitation IEC) and evaluations. IP women's participation shall be encouraged through training and participation. Due to watershed degradation and emerging water issues in urban areas, it is critical to ensure sustainable water resources. The IPs' potential role in watershed management shall be recognized, since often they reside in the vicinity of watersheds and major water sources. The WDs can advocate for and support integrated resource management of such areas. Since affordability may be a problem, the WD may actively work with the private sector, NGOs and local government units to leverage resources to expand the reach of water and sanitation services in IP territory.

30. The approach is to improve development outcomes for indigenous communities through their informed participation and decision making. Detailed social analysis and field assessments can be guided by the ADB's Handbook for Incorporation of Social Dimensions in Project Design and the ADB Operations Manual on Indigenous Peoples.

31. The prior and free informed consent of affected IP communities as defined under the IPRA shall be secured in all cases involving the following project activities: (i) commercial development of the cultural resources and knowledge of IPs; (ii) physical displacement from traditional or customary lands; and (iii) commercial development of natural resources within customary lands under use that would impact the livelihoods of the cultural, ceremonial, or spiritual uses that define the identity and community of IPs. For the purposes of policy application, the consent of affected IP communities refers to a collective expression by the affected IP communities, through individuals and/or their recognized representatives, of broad community support for such project activities. Broad community support may exist even if some individuals or groups object to the project activities.

32. Such consent will be documented through a written attestation by the duly recognized representatives of the IP community and the documentation of the minutes of the consultations

⁶ As per the ADB SPS (2009), meaningful consultation is defined as a process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues.

undertaken in which such consent was expressed, including a list of the names of the attendees along with their signatures or other forms of identification.

VI. DISCLOSURE

33. The affected IP community shall be informed of all project related information, including the social impact assessment, and shall be provided translated copies of the safeguard documents including the Resettlement Plan, the Gender Action Plan, the Indigenous Peoples Plan and the Environmental Impact Assessment Report. The responsibility center in the PIU/WD shall be responsible for disseminating the required information to the IP community.

34. The IPP shall describe the information disclosure, consultation and participation process with the affected IP communities during project preparation as well as the consultation and participation mechanisms to be used during implementation to ensure IP participation. The IPP will also summarize the IP communities' comments on the social impact assessment, identifies the concerns raised during consultations and how these have been addressed in project design.

35. In the case of project activities requiring broad community support and FPIC, the IPP shall document the process and outcome of the consultations for the project activities and safeguard measures addressing the impacts of these activities.

36. The IPP will confirm disclosure of the IPP to the affected IP communities. The IPPs shall be made available to the public through posting on the ADB website. The IPPF will be disclosed on websites of the EA and ADB.

VII. GRIEVANCE REDRESS MECHANISM

37. The Project's grievance redress mechanism (GRM) will be used as the mechanism for IPs to air project-related complaints or grievances. The IA with the support of project implementation consultants will inform indigenous groups about this system at the start of subproject implementation.

38. The Project's GRM, however, should not impede access to the country's jurisdiction or administrative remedies. To the extent possible, the resolution of grievances will be through traditional IP grievance resolution processes and systems, following the principle of precedence of customary laws in the IPRA. All costs involved in resolving the complaints (meetings, consultations, communication and reporting/information dissemination) will be borne by the EA.

39. The Water District Grievance Redress Committee (WDGRC, which will also handle IP issues) formed in each WD will receive grievance cases from affected IP community members. All the affected IP households will be informed of the GRM by means of community assemblies and/or the IP community leaders. The assistance of IP community leaders will be obtained to ensure that the grievance redress mechanism is accessible to the members of the community and is gender-inclusive. The WDGRC will be composed of the WD-PIU head as chair, concerned NGOs and barangay officials and women heads of households as members.

40. Cases of grievances will be documented in a culturally appropriate manner so as to establish a record of the nature of the grievance, the parties involved, the details of the discussion or deliberation on the case, and the agreement or decision reached which shall be signed or attested to in a manner customarily practiced by the parties concerned.

41. The decision of the court is for finality of case resolution. Below are the steps to be followed in filing grievances and the procedures for redress.

Step 1: The complainant, assisted if needed by a non-government organization (NGO) or an IP community leader, provides the background and files the grievance/complaint verbally or in writing to WDGRC. If unwritten, the WDGRC Secretary will put it in writing and will reproduce it in four (4) copies for distribution; the original copy to WDGRC, two are for the WD-PIU, and one for file of the complainant. The complainant, WDGRC, as well as representatives of PIU will meet to discuss the complaint and resolve it within 15 days.

Step 2: If no solution or understanding is reached within 15 days, the complainant files the grievance/complaint to the WDGRC central desk at the PMO for it to be resolved within 15 days after filing. The written complaint shall be reproduced in four (4) copies; the original to PMU/RC, two for WD-PIU, and one for the file of the complainant.

Step 3: Again, if no solution or understanding is reached within 15 days and if the grievance/complaint qualifies for hearing at the Municipal Trial Court (MTC) or Regional Trial Court (TRC), the household may request for assistance of the *pro bono* lawyer from the Public Attorney's office, through the WDGRC. The *pro bono* lawyer shall assist the household in reproducing the formal complaint in five (5) copies to be distributed as follows; the original to the appropriate court, one each for PMU, PIU, WDGRC and for the file of the complainant.

Step 4: The MTC or RTC assesses the merit of the grievance/complaint, schedules the hearing and renders a decision. Appeals can be elevated to the high court. The Supreme Court's decision is final and executory.

VIII. INSTITUTIONAL AND IMPLEMENTATION ARRANGEMENTS

42. WDDSP seeks to maximize the participation of IPs in the subproject areas, to ensure their equal inclusion in all subproject benefits, activities and training programs and to avoid or mitigate any adverse impacts of subprojects on IPs.

43. All IP activities will be carried out as part of the normal subproject development activities. Ethnic minority issues will be resolved or compensated through the agreed Project mechanisms and as established in the Project's resettlement framework/resettlement plan and in this IPPF.

44. Implementation of IPPs will be in partnership with NGOs and with concerned agencies such as the NCIP, Department of Environment and Natural Resources (DENR) and barangays and city government. Monitoring of the implementation of the IPPs will be the responsibility of the PMU at LWUA.

45. Survey and consultations will be done by the project preparation team. A responsibility center for social preparation, capacity building, social impact assessment, communication and preparation of IPPs, if required, shall be established within the WD. An NGO may be engaged to assist in the social development activities and shall be chosen following a selection process and criteria. (Please check Annex A: Sample Terms of Reference for NGO Participation.)

46. Since certain components require coordination with other agencies, the responsibility center is also designated to strengthen partnerships on such components as sanitation, pro-poor water provision, hygiene education and integrated watershed management plan implementation,

etc. Among others, partners for watershed management include DENR, NCIP, local government and appropriate agencies which may take the lead in plan implementation. Alternatively, the WD can initiate its own water source protection program. LWUA shall see to it that ADB's Policy on Indigenous Peoples is implemented through its monitoring and training support functions.

IX. MONITORING AND REPORTING ARRANGEMENTS

47. The PMU/LWUA, with assistance from the project implementation consultants, will be responsible for supervision and monitoring of IP- and ethnic minority-related issues for the Project, including documentation and reporting. The PMU will report on IPP implementation progress as part of quarterly project progress reports submitted to the EA and ADB. ADB supervision missions will also periodically review IPP progress and whether or not the subproject is successful in delivering culturally appropriate benefits and mitigating adverse impacts on ethnic minorities. The PMU will closely coordinate with the NCIP on monitoring of IP engagement, as per IPRA requirements.⁷.

48. Some indicators relating to process as well as attainment of targets are:

- Social equity can be gauged by size of the population that is served/proportionally represented as targets for access to services and in the water user groups.
- Number of IP households vs. number benefited (for water and sanitation).
- Number of IP workers/staff hired.
- Enhanced role of IPs in community resource management.
- Mechanisms/organizations established.
- Number of livelihood options established/number benefited.
- Linkages established in support of resource management initiatives.
- Output of specific interventions planned—e.g. number of seedlings produced/planted; number of hectares reforested/rehabilitated; survival rate of seedlings planted; number of water user groups established, repayment of microfinance funds.
- Level and quality of participation of IPs—organization of sanitation/water user group, when appropriate; number of participants/women in survey, focus group discussion, key informant interview; number and type of issues resolved.

X. BUDGET AND FINANCING

49. Budget for data-gathering is built into project survey and consultation expenses, including inventory of losses (IOL) for affected persons. IPs shall be targeted as beneficiaries of appropriate and affordable water and sanitation services. This shall be reflected in cost estimates for public faucets, septic tanks and other project features.

50. A special opportunity exists to strengthen forestry stewardship by residents in the vicinity of watersheds. Budgetary support should be established for elements of an IPP such as community organizing, resource management planning and development of livelihood options for buffer zone communities. Budget components will depend on available funding from the

⁷ Section 44 (h) in Chapter III of the IPRA mandates that the NCIP be involved in monitoring of project implementation in relation to indigenous peoples engagement.

WD's own resources, local government counterpart funds, Gender and Development funds and other external resources, and may include:

- Cost of appropriate and affordable water facility as determined by IP users.
- Microfinance allocation for appropriate sanitation facilities.
- Budgetary support for participatory watershed planning—this may be arranged as DENR/local government counterpart.
- Microfinance facility for development of compatible livelihood options such as seedling production, watershed protection, restocking of renewable resources to support rural industry such as bamboo and rattan, etc.
- Watershed management fund (may be managed as a component of WD operations or as contributions for implementation of a local watershed management plan).
- Water user fees, royalties or equivalent (which can be negotiated as contribution for watershed maintenance) – which may be 1% of gross income.
- Participatory monitoring and evaluation.

**Annex A:
Sample Guide for NGO Engagement**

1. The project shall invite applications for the pre-qualification process from organizations interested to be engaged as support organization for social development work in the Water District Development Sector Project (WDDSP).

2. Non-government organizations (NGOs) can be engaged for gender mainstreaming and community mobilization depending upon their capability to render the required services as shown in the criteria set for social activities both in pre-qualification and competitive bidding.

3. **Prerequisites for Pre-Qualification for NGOs.** A public notice in local newspaper and public billboards shall be published giving reasonable time for NGOs to apply for pre-qualification. The prerequisites to apply for pre-qualification shall be as follows:

- Must be registered as an NGO.
- Must have written constitution indicating objectives of organization.
- Must have its account audited each year and must submit the latest audit report.
- Must have at least two years of experience in implementation of participatory projects or community development in recent years.
- Newly established NGOs lacking two years of track record but staffed with adequate professionals in required disciplines having at least 5 years experience can also apply for corresponding pre-qualification package.
- Must have engaged professionals and other support staff or is in a position to engage staff.
- The organization must be based in the region or have permanent affiliated office in the province or city.
- The previously pre-qualified NGOs willing to apply for the present work are required to submit copies of renewal of registration and certificate of audit of preceding year.
- NGOs with female staff have an advantage.

4. **Competitive Bidding.** Evaluation of technical proposal and financial proposal will form the main basis for selection of organizations for social development work. Selection will be done by the water district (WD) with assistance of LWUA.

5. **Evaluation of Technical Proposals.** After preparing a list of organizations passing through pre-qualification process, WDDSP shall publish public notice for submission of technical and financial proposals from pre-qualified NGOs. Terms of reference for preparing technical proposal will be provided for competing organizations.

6. Evaluation of technical proposals for the social component will be done by scoring the marks on experience, concept and methodology, qualification and experience of proposed personnel, and financial soundness of the organization:

✓ Experience of organization	15
✓ Proposed concept and methodology	25
✓ Qualification and experience of proposed personnel	50
✓ Completeness of required document	10

7. The type of human resources required:

Type of Staff	Desired Qualification	Experience
Field Coordinator	Bachelor degree in any discipline	Two years in rural development
Community Organizer	Bachelor degree in social sciences	Two years in rural development
Community Mobilizer	Twelve years of schooling	Two years in the area

8. **Functions.** NGO may be contracted out to assist WD in community mobilization, microcredit, income generation, gender mainstreaming, organization of water user groups, training, and delivery of health and education services for the entire project site, with functions as follows:

- a. Assist in conduct of socio-economic survey, consultations and disclosure on project.
- b. Facilitate community planning for delivery of appropriate water and sanitation facilities.
- c. Formation and training of user groups for common water and sanitation facilities.
- d. Lending and management of microfinance facility for sanitation with training of organizations for community management.
- e. Conduct information dissemination on hygiene and sanitation.
- f. Assist WD in gender mainstreaming among clientele.
- g. Assess training needs of water user groups and facilitate training and community meetings.
- h. Participate in natural management planning and prepare resource management plan for specific area covered.
- i. Mobilize external resources for water-related income generating projects, for identified natural resource management and livelihood options and to expand reach of project benefits—e.g. to increase number of beneficiaries for public faucets, sanitation through coordination with other agencies.
- j. Facilitate integration of indigenous knowledge systems and practices in project planning and activities.
- k. Establish participatory monitoring and evaluation system.
- l. Training of WD staff and community volunteers on community organizing principles and techniques.

Annex B

Sample Budget Formulation and Implementation of IPP

Expense Category	Proposed Budget
Socio-economic survey	PhP 50,000
Social preparation and NGO community organizing	PhP 1,250,000
Cost of appropriate and affordable water facility	PhP 30,000 for 3 public faucets
Funds for microfinance facility for development of compatible livelihood options such as seedling production, watershed protection, planting of renewable resources to support rural industry such as bamboo and rattan, etc.	PhP 1,500,000
Cost for provision of appropriate sanitation facilities	PhP 40,000 for 2 shared sanitation facilities
Support for participatory watershed planning activities – may be arranged as local government counterpart	PhP 10,000
Watershed management fund for area to be managed by the WD	PhP 500,000
Watershed management fund reflected as water user fees, royalties or equivalent (which can be negotiated for use in watershed maintenance)	computed as 1% of gross income
Monitoring and evaluation	PhP 20,000
Total	PhP 2,400,000+

Annex C

Outline Of An Indigenous Peoples Plan⁸

This outline is part of the Safeguard Requirements. An Indigenous Peoples Plan (IPP) is required for all subprojects with impacts on Indigenous Peoples (IPs). Its level of detail and comprehensiveness is commensurate with the significance of potential impacts on IPs. The substantive aspects of this outline will guide the preparation of IPPs, although not necessarily in the order shown.

- A. **Executive Summary.** This section concisely describes the critical facts, significant findings, and recommended actions.
- B. **Description of the Subproject.** This section provides a general description of the subproject; discusses project components and activities that may bring impacts on IPs; and identifies the subproject area.
- C. **Social Impact Assessment.** This section:
- Reviews the legal and institutional framework applicable to IPs in the subproject context.
 - Provides baseline information on the demographic, social, cultural, and political characteristics of the affected IP communities; the land and territories that they have traditionally owned or customarily used or occupied; and the natural resources on which they depend.
 - Identifies key project stakeholders and elaborate a culturally appropriate and gender-sensitive process for meaningful consultation with IP at each stage of project preparation and implementation, taking the review and baseline information into account.
 - Assesses, based on meaningful consultation with the affected IP communities, the potential adverse and positive effects of the subproject. Critical to the determination of potential adverse impacts is a gender-sensitive analysis of the relative vulnerability of, and risks to, the affected IP communities given their particular circumstances and close ties to land and natural resources, as well as their lack of access to opportunities relative to those available to other social groups in the communities, regions, or national societies in which they live.
 - Includes a gender-sensitive assessment of the affected IPs' perceptions about the subproject and its impact on their social, economic, and cultural status.
 - Identifies and recommends, based on meaningful consultation with the affected IP communities, the measures necessary to avoid adverse effects or, if such measures are not possible, identifies measures to minimize, mitigate, and/or compensate for such effects and to ensure that the IPs receive culturally appropriate benefits under the subproject.
- D. **Information Disclosure, Consultation and Participation.** This section:
- Describes the information disclosure, consultation and participation process with the affected IP communities that was carried out during project preparation;
 - Summarizes their comments on the results of the social impact assessment and identifies concerns raised during consultation and how these have been addressed in project design;
 - In the case of subproject activities requiring broad community support, documents the process and outcome of consultations with affected IP communities and any agreement resulting from such consultations for the subproject activities and safeguard measures addressing the impacts of such activities;
 - Describes consultation and participation mechanisms to be used during implementation to ensure IPs participation during implementation; and
 - Confirms disclosure of the draft and final IPP to the affected IP communities.
- E. **Beneficial Measures.** This section specifies the measures to ensure that the IPs receive social and economic benefits that are culturally appropriate, and gender responsive.

⁸ Source: ADB. 2009. *Safeguard Policy Statement*. Manila.

F. Mitigative Measures. This section specifies the measures to avoid adverse impacts on IPs; and where the avoidance is impossible, specifies the measures to minimize, mitigate and compensate for identified unavoidable adverse impacts for each affected IP groups.

G. Capacity Building. This section provides measures to strengthen the social, legal, and technical capabilities of (a) government institutions to address IP issues in the subproject area; and (b) IP organizations in the subproject area to enable them to represent the affected IPs more effectively.

H. Grievance Redress Mechanism. This section describes the procedures to redress grievances by affected IP communities. It also explains how the procedures are accessible to IPs and culturally appropriate and gender sensitive.

I. Monitoring, Reporting and Evaluation. This section describes the mechanisms and benchmarks appropriate to the project for monitoring, and evaluating the implementation of the IPP. It also specifies arrangements for participation of affected IPs in the preparation and validation of monitoring, and evaluation reports.

J. Institutional Arrangement. This section describes institutional arrangement responsibilities and mechanisms for carrying out the various measures of the IPP. It also describes the process of including relevant local organizations and NGOs in carrying out the measures of the IPP.

K. Budget and Financing. This section provides an itemized budget for all activities described in the IPP.