Note: This ISDS will be considered effective only upon approval of the project restructuring

#### Report No.: ISDSR16744

### Date ISDS Prepared/Updated: 23-Jan-2016

### I. BASIC INFORMATION

#### 1. Basic Project Data

Country:	Philip	pines		Project ID:	P145391				
Project Name:	Studie	Studies for Sustainable Flood Management (P145391)							
Task Team	Joop S	Stoutjesdijk							
Leader(s):									
Estimated	15-Ap	or-2014		Estimated	31-Oct-2	014			
Appraisal Date:				<b>Board Date:</b>					
Managing Unit:	GWA	02		Lending Instrument:	Specific	Investment Loan			
Sector:	Flood	protection (100%	)						
Theme:	Water	Water resource management (70%), Natural disaster management (30%)							
Recovery) or OF Emergencies)? Financing (in US						No			
			,		•	0.00			
Total Project Cos					ancing:	0.00			
Financing Gap:		0.00							
8	Financing Source					Amount			
Borrower					1.20				
Philippines - Fr	ee-stan	ding Trust Fund	Program	l	3.20				
Total						4.40			
Environmental	A - Fu	ıll Assessment							
Category:									
Is this a	No								
Repeater									
project?									

### 2. Current Project Development Objectives

The development objective is to prepare priority projects that aim to improve flood management and resilience in the Greater Metro Manila Area.

#### Proposed New PDO (from Restructuring Paper)

The project development objective is to prepare a priority project that aims to improve flood management and resilience in the Greater Metro Manila Area.

Public Disclosure Copy

#### 3. Project Description

The Metro Manila Flood Management Master Plan (approved by the Government of the Philippines (GoP) in September 2012) proposes a large program of priority infrastructure to safely manage and control major flood events in the Greater Metro Manila Area that comprises Metro Manila and Laguna de Bay and its shore areas. Among the main large-scale priority interventions that have been identified in the Master Plan are: (i) a high dam in the upper Marikina River catchment area to reduce the peak flows entering the city during typhoon and other extreme rainfall events; (ii) flood protection works in the Marikina River, upstream of the proposed Phase IV of the Pasig-Marikina River Channel Improvement Program; (iii) land raising or another similar development along the western shore of Laguna de Bay to protect the population against high water levels in the lake; and (iv) further development of a comprehensive flood forecasting system and monitoring and early warning system for the Greater Metro Manila Area, with maximum participation of local communities.

The government intends to start the implementation of the Master Plan with substantial investments as soon as possible. It is therefore necessary to prepare some of the large high priority investments, both structural and non-structural, as well as develop improved institutional arrangements for flood management. Such investments will be essential to make substantial improvements to flood management in large parts of the Greater Metro Manila Area.

This project will finance two components, the main one related to the carrying out of feasibility and design studies and preparation of tender documents of priority infrastructure that, when implemented, will lead to substantially increased safety of the population during flood events. A small second component relates to project management and administration.

Component A – Preparation of feasibility and design studies for priority flood management infrastructure. Feasibility and design studies will be prepared for a high dam in the upper Marikina River catchment area. Government received also a US\$2.73 million PHRD grant which will finance the preparation of the other major interventions mentioned in the first paragraph above (i.e. interventions (ii) and (iv), except the one for Laguna de Bay that will now be pursued through PPP funding. A multi-disciplinary team of consultants, including expertise in civil engineering, dam engineering, resettlement, hydrology, economics, social science, environment, urban renewal, etc., will be recruited to prepare the detailed feasibility and design studies for the dam. The feasibility studies will review the various options for flood management improvements in the study area, including a quick assessment of related social and resettlement impacts in terms of magnitude, costs, and risks, to be followed immediately by design studies and preparation of tender documents of the selected option. The design phase will include the technical and engineering studies, economic studies, and social and environmental studies, all in compliance with the relevant World Bank Operational and Safeguard Policies and government requirements, and up to a level ready for appraisal/financing by the government, possibly with the assistance of international organizations such as the World Bank. It is anticipated that one consulting firm/institute will be hired for the social and environmental assessments for interventions (i) and (ii) mentioned in the first paragraph above. A Panel of Experts on Dams will be established as per OP on Dam Safety.

Component B – Project management and administration. Operational expenses for the Department of Public Works and Highways (DPWH) will be financed to manage the implementation of the grant and monitor the consultants and the outputs of the services. Fixed costs, such as staff costs, will be

paid for by DPWH. The government's Commission on Audit (COA) will conduct the annual audit of the grant.

# **4.** Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The project location is the upper catchment area of the Marikina River, where the potential dam will be located.

### 5. Environmental and Social Safeguards Specialists

Gerardo F. Parco (GEN02) Roberto B. Tordecilla (GSU02)

6. Safeguard Policies	Triggered?	Explanation (Optional)
6. Safeguard Policies Environmental Assessment OP/BP 4.01	Triggered?   Yes	While the project only supports the preparation of engineering designs of a priority investment identified in the Metro Manila Flood Management Master Plan, i.e. a high dam in the upper Marikina River catchment area, and the conduct of environmental and social assessments for this priority investment, the policy is triggered since these studies are expected to lead to investments expected to have positive but also potentially adverse environmental and social impacts if not managed adequately. Part of this project is the conduct of environmental and social assessments to assess impacts and put forward options and mitigation measures to be considered in the engineering designs of the proposed investment. The environmental and social assessments will be carried out by DPWH with technical assistance and support from qualified consultants to ensure that the Bank's and the National Government's environmental and social safeguard policies are being followed and complied with. The environmental and social impact assessment (ESIA) will carefully assess the environment and social impacts of the proposed investment, including cumulative impacts, and lay out detailed plans for mitigation in the Environmental and Social Management Plan (ESMP), including a monitoring and reporting program. An institutional assessment and capacity building plan for
		DPWH's Environmental and Social Safeguards Division (ESSD) will be prepared as well. The ESMP will be properly costed to ensure that the costs to fully implement it get incorporated into any future civil works contract.
		it get incorporated into any future civil works contract. A Grievance Redress Mechanism will be developed and be detailed in the ESMP and be presented during public consultations.

		A covenant has been added in the amendment letter that requires the Recipient to ensure that the environmental and social safeguard instruments to be prepared under the Project are prepared and carried out under terms of reference satisfactory to the World Bank and in compliance with the World Bank safeguard policies.
Natural Habitats OP/BP 4.04	Yes	The ESIA will identify natural habitats and other ecologically sensitive areas that may be affected by the investment. The project will not support activities that would significantly convert or degrade critical natural habitats consistent with the policy. If the ESIA indicates that the project would significantly convert or degrade non-critical natural habitats, the project would include acceptable mitigation measures in the ESMP. Such mitigation measures could include, as appropriate, minimizing habitat loss (e.g. strategic habitat retention and post-development restoration) and establishing and maintaining an ecologically similar protected area.
Forests OP/BP 4.36	Yes	The ESIA will confirm the project impacts on forests and forest-dependent communities, if any, particularly in and around the proposed dam site. As needed, the ESMP will include measures to address impacts on forests, forest health, and forest-dependent communities, if present.
Pest Management OP 4.09	No	The project will not support directly or indirectly any investments that would trigger the policy.
Physical Cultural Resources OP/BP 4.11	Yes	The ESIA will closely assess the various alternative technical options to determine any possible cause of disturbance and negative impacts to historical areas, architectural land marks, and other cultural property, which may need to be mitigated. During construction, the landscape of the sites may also be affected. The ESIA will confirm impacts of priority investments on physical cultural resources (PCR), and where needed a PCR management plan will be formulated as part of the ESMP, including chance find procedures that will be followed during construction.
Indigenous Peoples OP/ BP 4.10	Yes	The whole of Metro Manila does not have ancestral domains and/or Indigenous Peoples (IP) communities. However, a study done in early 2000s for another project found that there are IP communities in the upland areas of 8 LGUs of Rizal Province. Initial investigations have shown that there are no settlements in and around the proposed reservoir area of the Marikina Dam. The area is, however, part of the ancestral domain of the indigenous Dumagat-Remontados people.

		Further screening will be carried out by the social and environment consultants early on during the implementation of the studies and if the screening confirms their presence in and around the proposed reservoir area social assessment to comply with the policy will be incorporated in the ESIA and an indigenous peoples (IP) Framework and/or IP Plan will be developed, as needed.
Involuntary Resettlement OP/BP 4.12	Yes	It is not expected that people live in the future reservoir area of the dam, or if there are the number will be very limited. Although unlikely, there may be some temporary affected households during construction, downstream households potentially affected by dam, as well as well as potentially affected households by ancillary activities and associated facilities. This will be determined during preparation of studies through screening. Based on the results of the screening, the preparation of a Resettlement Action Pan (RAP) may be needed. Although not expected, an RPF may also be prepared by the Recipient if there are elements of the project design that remain unidentified. This is to be determined during preparation of studies and agreed with the Bank. The ToR for the RAP and RPF, if required, are to be submitted to RSA for review and clearance. Based upon the results of the screening and the scope of
		potentially affected households it will be determined whether an Independent Panel of Experts is required as per OP 4.01.
Safety of Dams OP/BP 4.37	Yes	Since the project will entail the design of a high dam this policy is triggered. OP 4.37 requires that experienced and competent professionals design and supervise construction, and that the borrower adopts and implements dam safety measures through the project cycle. A Panel of Experts on Dams with the needed technical expertise will be established by the time the studies start.
Projects on International Waterways OP/BP 7.50	No	The sub-project will not be in international waterways.
Projects in Disputed Areas OP/BP 7.60	No	The sub-project will not be in disputed areas.

## II. Key Safeguard Policy Issues and Their Management

## A. Summary of Key Safeguard Issues

**1.** Describe any safeguard issues and impacts associated with the Restructured project. Identify and describe any potential large scale, significant and/or irreversible impacts: The project itself is meant to produce design studies. While by itself the project is not expected to have social and environmental impacts, the studies will identify impacts related to the future construction of a dam and its operation and incorporate mitigating measures in the ESMP and the design of the civil works. The potential environment and social issues described in the previous section of ISDS will be carefully taken into account during the preparation of the studies.

## **2.** Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

Improved flood management in the Greater Metro Manila Area is the anticipated result when the dam is eventually constructed in future. This will help improve the quality of life and socioeconomic well-being of communities that currently are regularly subjected to flooding from the Pasig-Marikina River. Any potentially induced or cumulative impacts related to the flood control management of the dam will be assessed as part of the EISA.

## **3.** Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

An analysis of alternatives, in terms of type of civil works and location, was carried out as part of the master plan preparation. A more detailed analysis will be carried out early on during the implementation of this project as part of the feasibility study to determine in detail the alternative that will have the least environmental and social impacts, while being technically viable and economically most attractive. The selected option will then be worked out up to design level, including tender documents.

## 4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

DPWH is familiar with the Bank Safeguards Policies. It has an Environmental and Social Safeguards Division (ESSD), primarily dedicated to the environmental and social impact management of their different projects. It maintains separate sets of safeguard standards depending on the funding source of the project it implements. The performance of ESSD, based on the recent World Bank thematic review for the Philippines, points to the need of putting in place a capacity building program if it is to be in charge of handling safeguard issues during the future implementation of the designs prepared under this project. ESSD will benefit by strengthening its capacity to manage and coordinate the safeguards principles and procedures especially related to the preparation of the environmental and social assessment studies. The consultants that will prepare the environmental and social impact assessment (ESIA), environmental and social management plan (ESMP), and resettlement action plan (RAP), as needed, will work closely with ESSD during the preparation of the studies.

A Panel of Experts on Dams will be established as per OP on Dam Safety. If determined required during the studies an Independent Panel of Experts will also be established as per OP 4.01.

## 5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The key stakeholders of the project are the people living in the project affected area that remains to be determined during the preparation of studies and the corresponding local governments units (LGU) that are affected by recurrent flooding along the Pasig-Marikina River. There will be at least two formal consultations through workshops (one at the beginning of the study and one after the draft reports have been prepared), as well as informal consultations as needed with the potentially affected households, non-governmental organizations (NGO) and civil society organizations (CSO), LGUs, government agencies, etc. DPWH, with support of the Bank task

team and other agencies, as needed, will implement an information campaign that emphasizes expectations and transparency.

### **B.** Disclosure Requirements

29-Feb-2016 31-Mar-2016 31-Mar-2016 31-Mar-2016 29-Feb-2016 31-Mar-2016 31-Mar-2016
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Cultural Resources policies, the the Environmental Assessment/

C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment						
Does the project require a stand-alone EA (including EMP) report?	Yes [	]	No [	]	NA [	]
OP/BP 4.04 - Natural Habitats						
Would the project result in any significant conversion or degradation of critical natural habitats?	Yes [	]	No [	]	NA [	]
If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?	Yes [	]	No [	]	NA [	]
OP/BP 4.11 - Physical Cultural Resources						
Does the EA include adequate measures related to cultural property?	Yes [	]	No [	]	NA [	]

Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?	Yes [	]	No [	]	NA [	]
OP/BP 4.10 - Indigenous Peoples						
Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?	Yes [	]	No [	]	NA [	]
OP/BP 4.12 - Involuntary Resettlement						
Has a resettlement plan/abbreviated plan/policy framework/ process framework (as appropriate) been prepared?	Yes [	]	No [	]	NA [	]
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	Yes [	]	No [	]	NA [	]
Is physical displacement/relocation expected?	Yes [	]	No [	]	TBD [	]
Provided estimated number of people to be affected						
Is economic displacement expected? (loss of assets or access to assets that leads to loss of income sources or other means of livelihoods)	Yes [	]	No [	]	TBD [	]
Provided estimated number of people to be affected			-			
OP/BP 4.36 - Forests						
Has the sector-wide analysis of policy and institutional issues and constraints been carried out?	Yes [	]	No [	]	NA [	]
Does the project design include satisfactory measures to overcome these constraints?	Yes [	]	No [	]	NA [	]
Does the project finance commercial harvesting, and if so, does it include provisions for certification system?	Yes [	]	No [	]	NA [	]
OP/BP 4.37 - Safety of Dams	1					
Have dam safety plans been prepared?	Yes [	]	No [	]	NA [	]
Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?	Yes [	]	No [	]	NA [	]
Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?	Yes [	]	No [	]	NA [	]
The World Bank Policy on Disclosure of Information						
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [	]	No [	]	NA [	]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [	]	No [	]	NA [	]
All Safeguard Policies						
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [	]	No [	]	NA [	]
			-			

Have costs related to safeguard policy measures been included in the project cost?	Yes [	]	No [	]	NA [	]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [	]	No [	]	NA [	]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [	]	No [	]	NA [	]

## **III. APPROVALS**

Task Team Leader(s):	Name: Joop Stoutjesdijk	
Approved By		
Safeguards Advisor:	Name: Peter Leonard (SA)	Date: 23-Jan-2016
Practice Manager/	Name: Ousmane Dione (PMGR)	Date: 25-Jan-2016
Manager:		