

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCESKAGAWARAN NG KAPALIGIRAN AT LIKAS YAMAN



MEMORANDUM

FOR/TO: Director, Legal Affairs Service (Vice-Chairperson, PTWG)

Assistant Director, Biodiversity Management Bureau

Assistant Director, Ecosystems Research and Development Bureau

Assistant Director, Environmental Management Bureau

Assistant Director, Forest Management Bureau Assistant Director, Land Management Bureau Assistant Director, Mines and Geosciences Bureau

Representative, Office of the Undersecretary for Integrated

Environmental Science

Representative, Office of the Undersecretary for Legal and Administration

Representative, Office of the Undersecretary for Finance, Information Systems and Climate Change

Representative, Office of the Undersecretary Policy, Planning and International Affairs

Representative, Office of the Undersecretary for Field Operations (FO) – Luzon, Visayas and Environment

Representative, Office of the Undersecretary for FO – Mindanao Representative, Office of the Assistant Secretary for Legal Affairs Representative, Office of the Assistant Secretary for Policy, Planning and Foreign-Assisted and Special Projects

Representative, Office of the Assistant Secretary for FO – Eastern Mindanao

Representative, Office of the Assistant Secretary for FO – Luzon and Visayas

Representative, Office of the Assistant Secretary for FO – Western Mindanao

Representative, Legal Affairs Service

Representative, Knowledge and Information Systems Services

Representative, Climate Change Service Representative, River Basin Control Office

Representative, National Water Resources Board

Representative, Foreign-Assisted and Special Projects Service

FROM : The Chairperson and OIC Director

Policy and Planning Service

MEMO NO. 2023 - 1070

SUBJECT

SUMMARY OF AGREEMENTS OF THE POLICY TECHNICAL WORKING GROUP MEETING NO. 2023-12 HELD ON NOVEMBER

17, 2023

DATE

1 3 DEC 2023

We are furnishing herewith the summary of agreements during the Policy Technical Working Group Meeting No. 2023-12 held on 17 November 2023, which tackled the draft DENR Administrative Order (DAO) re: "Guidelines on the Development of Payments for Ecosystem Services (PES) for Water Use to Finance Watershed Management in the Philippines"

For information and/ or appropriate action, please.

CHERYL LOISE T. LEAL



DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES KAGAWARAN NG KAPALIGIRAN AT LIKAS YAMAN



PTWG No. 2023-12 **SUMMARY OF AGREEMENTS**

17 November 2023 | OASIA Conference Room 5/F DENR-Central Office Building, Visayas Ave., Diliman Quezon City

I. Attendees:

Presiding Officer: Dir. Norlito A. Eneran (Vice-Chairperson)

PTWG Members:

- 1. RBCO ED Sevillo D. David, Jr.
- 2. RBCO DED Nelson Gorospe
- 3. OUIES Ms. April Szyan Joy Jumpalan
- 4. OUIES Ms. Dahnna Marie S. Desov
- 5. LMB Ms. Jewel Lyne M. Templonuevo
- 6. OASFOLV For. Josefina M. Ocampo
- 7. RBCO For. Jestine Mea A. Tumbaga
- 8. RBCO Ms. Iya Ray Lau
- 9. NWRB Engr. Isiah John Mangunay
- 10. MGB Mr. Armani Yula V. Estanislao
- 11. OUFOLVE Engr. Myla Carungi
- 12. MGB Mr. Mel Anthony Casulla
- 13. MGB Mr. Aeron Elvin dela Cruz
- 14. FMB For. Lemuelle Celis
- 15. FMB For. Randy A. Nunez
- 16. FMB Olivo C. Barrientos

- 17. OUFOM For. Jeruz Pahilanga
- 18. OASPPFASP Ms. Angelica V. Tugade
- 19. OUPPIA Ms. Maria Magnolia Q. Danganan
- 20. BMB Mr. Jayson Pujeda
- 21. OULA Ms. Lolita Presbitero

Secretariat

- 22. PSD For. Llarina S. Mojica
- 23. PSD For. Amisol B. Talania
- 24. PSD For. Kelsie C. Miniano
- 25. PSD For. Emma Baradi-Medina
- 26. PSD For. Jezreelyn Milar
- 27. PSD Mr. Nehemiah Leo Carlo Salvador

The meeting was called into order by the PTWG Vice-Chairperson, Dir. Norlito Eneran of the Legal Affairs Service at 9:38 AM. The agenda has been approved and adopted.

The rationale/ background was discussed by For. Nelson Gorospe, Deputy Executive Director of the River Basin Control Office comprising the introduction of Payment for Ecosystem Services (PES), PES cases in the country and other PES schemes being implemented in other countries. He highlighted the success factors in implementing PES by noting the experiences of sellers of different types of Environmental Services. According to him, the draft DAO will result to the approval and eventual implementation of the following: (1) Availability of funds for river basin/ watershed management; (2) Increase capacity of LGUs to implement PAPs related to the devolved functions in compliance to the devolved functions in compliance to Mandanas ruling; (3) Incentivized communities/ POs/LGUs to be involved in River Basin Watershed Management; (4) Increased awareness on the part of the general public on the importance of water conservation; and (5) Improved River Basin Watershed resilience to impacts of climate change.

For. Gorospe clarified that PES policies are work in progress and they have considered developing a policy for groundwater later on. He also stated that DENR doesn't have the mandate to collect payments for Ecosystem Services, hence, a law to authorize DENR is needed.

The summary of agreements are as follows:

II. Agreements on the Draft DENR Administrative Order (DAO) re Guidelines on the Development of Payments for Ecosystem Services (PES) for Water Use to Finance Watershed Management in the Philippines

SECTION	COMMENTS/ AGREEMENTS/WAYS FORWARD
Subject/Title	 Revise the subject/title to: "Guidelines on the Development of Payment for Ecosystem Services (PES) for Water Use to Finance River Basin and Watershed Management"
Prefatory Statement	 Cite the Regalian Doctrine or the Article 12 Section 2 of the Constitution on the utilization of natural resources; Include DAO No. 2019-06 or the policy adopting the Philippine Master Plan for Climate Resilient Forestry Development (PMPCRFD) and to also cite DAO No. 2016-12 or the policy adopting the Philippine Biodiversity Strategy and Action Plan (PBSAP) 2015-2028; Include Joint Memorandum Circular (JMC) No. 1998-01 re "Manual of Procedures for DENR-DILG-LGU Partnership on Devolved and other Forest Management Functions; and Remove the Water Security Roadmap since there is no approved policy adopting the roadmap.
Section 1. Basic Policy	 Delete the second paragraph and incorporate under the scope and coverage.
Section 2. Objectives	Revise the general objective as: "The general objective of this Order is to provide guidelines in the development and implementation of PES mechanisms for water users in the Philippines through the establishment of innovative financing schemes to achieve sustainable Environment and

Section 3 Seems and Coverage	Natural Resources (ENR) management to ensure the continuous flow of ecosystem services from river basins and watersheds." Revise the specific objectives under item (b) to read as: "To define the roles and responsibilities of PES actors on the implementation of PED schemes and mechanisms." Retain the specific objectives under item (d) and to delete the words "adoption and".
Section 3. Scope and Coverage	 Delete the second paragraph since the term ecosystem services was already defined under the definition of terms; For uniformity and consistency with the revised title, add "river basin" to this section and other succeeding sections; Delete "PES for water users, water suppliers and other PES buyers and sellers (actors)" and replace with "PES schemes" Reformulate the scope and coverage to: "This guidelines shall cover the development of PES schemes in river basins/ watersheds including those within protected areas, in order to finance and/or support development and management activities identified in the Integrated River Basin Management and Development Master Plan (IRBMDMP), Integrated Watershed Management Plans (IWMP) and Protected Area Management Plans (PAMP), among others." To add limitations and mention that groundwater is not included or covered in the draft DAO. Request and consolidate the input/s of the Bureaus regarding the plans mentioned in the draft DAO.
Section 4. Definition of Terms	Update the definition of the term "ecosystem services" and include the
	deleted definition in the last paragraph of the scope and coverage;

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Section 5. General Considerations in the Development of PES for Water Use	 Section 5 to rename as "Phases of PES for Water Use"; Include "and volume" in item (c); Develop a template of agreement or contract regarding negotiated transaction; and Include the phases of PES in narrative form as cited in the Appendix I of Annex instead of general considerations in the development of PES.
Section 6. PES Mechanism Development	 Replace "such organizations" with Local Government Units (LGUs) and emphasize that they are highly encouraged to follow the phases of PES mechanism development; Concern regarding the formulation of management plan in the original tool kit was raised. Thereby, reflect the integration of activities in existing plans/management plans in the draft DAO; Add a new provision for protected areas and insert the following: "Protected Areas Management Boards shall impose PES for water use generated within the PA. The payment shall be over and above existing fees imposed in SAPA and other tenurial instruments within the PA."; and Add another provision for cost-recovery for water pricing as cited in the PES mechanism development
Section 7. Cost-recovery for Water Pricing	Adopted
Section 8. Roles and Responsibilities of the DENR and other PES Actors	 Add other functions of DENR aside from being an oversight committee. Existing Management Bodies under item 8.3 to be merged with 8.2; Revise last paragraph of 8.2 as: "In cases where there are existing management bodies such as" Revise second sentence of the last paragraph as: "The TWGs of these management bodies shall act as the TWG for PES" Adjust "Ecosystem Service Sellers" as item 8.3; and Rephrase item 8.5 as:

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"TI ' I I I I I I I I I I I I I I I I I I
"The intermediaries shall
perform the following functions".
Adopted
• Change the "higher DENR
management" to "Undersecretary for
Policy and Planning"; and
Refer to the Project Monitoring and
Evaluation Division (PMED) of the
Policy and Planning Service;
Adopted
 PSD to circulate the PES toolkit to the
PTWG members for their comments
and/or inputs to be submitted on or
before December 1, 2023.

The draft DAO is subject to revisions based on the comments of PTWG members. The meeting adjourned at 3:21 $\rm PM$

Prepared by the Secretariat

Noted by:

ATTY. NORLITO A. ENERAN
Director, Legal Affairs Service and
Vice Chairperson, DENR-PTWG



DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES KAGAWARAN NG KAPALIGIRAN AT LIKAS YAMAN



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Section 1. Basic Policy	Delete the second paragraph and incorporate under the scope and coverage.
Section 2. Objectives	Revise the general objective as: "The general objective of this Order is to provide guidelines in the development and implementation of PES mechanisms for water users in the Philippines through the establishment of innovative financing schemes to achieve sustainable Environment and

Natural Resources (ENR) management to ensure the continuous flow of ecosystem services from river basins and watersheds." Revise the specific objectives under item (b) to read as: "To define the roles and responsibilities of PES actors on the implementation of PED schemes and mechanisms." • Retain the specific objectives under item (d) and to delete the words "adoption and". Section 3. Scope and Coverage • Delete the second paragraph since the term ecosystem services was already defined under the definition of terms; • For uniformity and consistency with the revised title, add "river basin" to this section and other succeeding sections: • Delete "PES for water users, water suppliers and other PES buyers and sellers (actors)" and replace with "PES schemes" Reformulate the scope and coverage "This guidelines shall cover the development of PES schemes in river basins/ watersheds including those within protected areas, in order to finance and/or support development and management activities identified in the Integrated River Basin Management and Development (IRBMDMP), Master Plan Integrated Watershed Management Plans (IWMP) and Protected Area Management Plans (PAMP), among others." To add limitations and mention that groundwater is not included covered in the draft DAO. Request and consolidate the input/s of the Bureaus regarding the plans mentioned in the draft DAO. Section 4. Definition of Terms Update the definition of the term "ecosystem services" and include the deleted definition in the last paragraph of the scope and coverage;

Section 5. General Considerations in the Development of PES for Water Use Section 6. PES Mechanism	 Section 5 to rename as "Phases of PES for Water Use"; Include "and volume" in item (c); Develop a template of agreement or contract regarding negotiated transaction; and Include the phases of PES in narrative form as cited in the Appendix I of Annex instead of general considerations in the development of PES. Replace "such organizations" with
Development V. PLS Mechanish	 Replace "such organizations" with Local Government Units (LGUs) and emphasize that they are highly encouraged to follow the phases of PES mechanism development; Concern regarding the formulation of management plan in the original tool kit was raised. Thereby, reflect the integration of activities in existing plans/management plans in the draft DAO; Add a new provision for protected areas and insert the following: "Protected Areas Management Boards shall impose PES for water use generated within the PA. The payment shall be over and above existing fees imposed in SAPA and other tenurial instruments within the PA."; and Add another provision for cost-recovery for water pricing as cited in the PES mechanism development
Section 7. Cost-recovery for Water Pricing	Adopted
Section 8. Roles and Responsibilities of the DENR and other PES Actors	 Add other functions of DENR aside from being an oversight committee. Existing Management Bodies under item 8.3 to be merged with 8.2; Revise last paragraph of 8.2 as: "In cases where there are existing management bodies such as" Revise second sentence of the last paragraph as: "The TWGs of these management bodies shall act as the TWG for PES" Adjust "Ecosystem Service Sellers" as item 8.3; and Rephrase item 8.5 as:

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	"The intermediaries shall
	perform the following functions".
Section 9. Capacity Building and	Adopted
Communication, Education and Public	
Awareness (CEPA) Plan	
Section 10. Monitoring, Evaluation and	• Change the "higher DENR
Reporting	management" to "Undersecretary for
	Policy and Planning"; and
	Refer to the Project Monitoring and
	Evaluation Division (PMED) of the
	Policy and Planning Service;
Section 11. PES Initiatives Database	Adopted
Section 12. Funding	Adopted
Section 13. Separability Clause	Adopted
Section 14. Repealing Clause	Adopted
Section 15. Effectivity Clause	Adopted
Way Forward	 PSD to circulate the PES toolkit to the
-	PTWG members for their comments
	·
	and/or inputs to be submitted on or before December 1, 2023.

The draft DAO is subject to revisions based on the comments of PTWG members. The meeting adjourned at $3:21\ PM$

Prepared by the Secretariat

Noted by:

ATTY. NORLITO A. ENERAN
Director, Legal Affairs Service and
Vice Chairperson, DENR-PTWG

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DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES KAGAWARAN NG KAPALIGIRAN AT LIKAS YAMAN



DENR ADMINISTRATIVE ORDER NO. 2023 -

SUBJECT: GUIDELINES ON THE DEVELOPMENT OF PAYMENT FOR ECOSYSTEM SERVICES (PES) FOR WATER USE TO FINANCE RIVER BASIN AND WATERSHED MANAGEMENT

Pursuant to Section 2 Article 12 of the 1987 Philippine Constitution; Presidential Decree (PD) No. 1067, otherwise known as "Water Code of the Philippines"; PD No. 705 or the "Revised Forestry Code of the Philippines", as amended; Executive Order (EO) No. 192, s.1987 otherwise known as the "Reorganization Act of the Department of Environment and Natural Resources"; Republic Act (R.A.) No. 9275, also known as "An Act for a Comprehensive Water Quality Management and for Other Purposes"; R.A. No. 7160, otherwise known as the "Local Government Code of 1991"; R.A. No. 7586, or the "National Integrated Protected Areas System Act of 1992", as amended by R.A. No. 11038, also known as the "Expanded National Integrated Protected Areas System Act of 2018"; EO No. 318, s. 2004 or "Promoting Sustainable Forest Management in the Philippines"; and Joint Memorandum Circular (JMC) No. 1998-01 entitled, "Manual of Procedures for DENR-DILG-LGU Partnership on Devolved and other Forest Management Functions"; this guidelines is hereby promulgated to promote payment for ecosystem services on water use to finance watersheds and/or river basin management in the Philippines

This guidelines is also in accordance with DENR Administrative Order (DAO) No. 2016-12 or the adoption of Philippine Biodiversity Strategy and Action Plan (PBSAP) 2015-2028 on which payment for ecosystem services (PES) schemes are recognized as means to provide opportunities for private sector investment to complement public sector management in ecosystem conservation and management; DAO No. 2019-06 or the adoption of Philippine Master Plan for Climate Resilient Forestry Development (PMPCRFD) on which PES is considered as an innovative sustainable financing mechanism to ensure continuity of project and programs implementation; and other related policies.

SECTION 1. Basic Policy. It is the policy of the State to protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature and to enjoin the participation of national and local governments, businesses, non-government organizations, and local communities in building resilience for climate change adaptation through the establishment of innovative financing schemes to achieve sustainable Environment and Natural

Resources (ENR) management and to ensure the continuous flow of ecosystem services from river basins and watersheds.

SECTION 2. Objectives. The general objective of this Order is to provide guidelines in the development and implementation of PES mechanisms for water users in the Philippines through the establishment of innovative financing schemes to achieve sustainable ENR management to ensure the continuous flow of ecosystem services from river basins and watersheds.

Specifically:

- To disseminate information on available PES mechanisms on water use in watersheds as a means to create new sources of funds for conservation and management;
- b. To define the roles and responsibilities of PES actors on the implementation of PES schemes and mechanisms
- c. To develop suitable PES mechanisms for water use; and
- d. To expand the implementation of PES mechanisms in the country.

SECTION 3. Scope and Coverage. This guidelines shall cover the development of PES schemes in river basins/ watersheds including those within Protected Areas (PAs), in order to finance and/or support development and management activities identified in the Integrated River Basin Management and Development Master Plan (IRBMDMP), Integrated Watershed Management Plans (IWMP) and Protected Area Management Plans (PAMP), among others.

SECTION 4. Definition of Terms. As used in, and for the purpose of this guidelines, the following terms and phrases shall be understood to mean:

a. **Ecosystem Services (ES)** - refer to the benefits people obtain from the ecosystems such as:

Provisioning services - material products that people obtain from the ecosystem such as water, food, and raw materials like wood, biofuels, fibers, and medicinal resources;

Regulating services - benefits obtained from the regulation of ecosystem structure and processes. These include air and water purification, carbon sequestration and storage, climate regulation, erosion and flood control, and pollination;

Supporting services - the processes needed to provide other ecosystem services such as nutrient cycling, maintenance of genetic diversity and habitat for species; and

Cultural services - non-material benefits such as recreation or aesthetic inspiration, tourism, cultural identity, and spiritual experience related to the natural environment.

Ecosystem Services shall refer to the benefits derived by water users from water resources flowing from river basins and watersheds as a result of development and management plans implemented by environment and natural resources managers.

- b. ES Buyers are water resource users that contribute payments/rewards and/or non-fiscal incentives to sellers to ensure the provision of ecosystem services. These include, but are not limited to: households, food and agriculture producers, water service providers, hydropower companies, tourism facility operators and commercial and industrial establishments.
- c. ES Sellers are water resource managers who will ensure that the delivery of ecosystem service continue through protection, conservation and development activities funded by payments, rewards, or non-fiscal incentives coming from the ES buyers.
- d. Intermediaries are individuals or entities who can serve as agents linking water resource user(s) and water resource manager(s) and can assist with scheme design and implementation. These may include DENR, Local Government Units (LGUs), other government organizations and civil society organizations that have experience in environmental and financial management.
- e. **Knowledge Providers** are individuals or entities who can support the development and scaling up of PES schemes. Aside from the DENR, these may include the academe, environmental or community-based organizations and watershed management councils that have expertise in PES; disaster risk reduction and management and environmental management specialists and/or researchers interested in the science underpinning PES; legal specialists interested in land management agreements; and economists who have experience in valuing ecosystem services.
- f. Payment for Ecosystem Services contextually refers to a variety of schemes and arrangements where the ES buyer(s) or beneficiaries of water resources agree to provide payments (e.g. environmental fees, water levies) or rewards to the ES seller(s) who effectively provide and sustain the delivery of water resource services as a result of the implementation of river basin and watershed development and management plans.

- g. **PES Actors** are the key players in a PES scheme such as the ES buyers, ES sellers, intermediaries, knowledge providers, including the DENR as the lead facilitator in the development and implementation of the PES schemes.
- h. Ridge-to-Reef refers to integrated approaches to freshwater and coastal area management emphasizing the interconnections between natural and social systems from the mountain ridges to fringing reef environments. The Reef-to-Ridge management approach addresses the threats in the uplands, lowlands and coastal areas in an integrated way resulting in the development of coastal resources that are sustainable, allowing these resources to continue providing environmental services to support livelihood, ecotourism, industrial and other socio-economic activities.
- i. **River basin** consists of one or more watersheds with land drainage area greater than 1,000 sq. km. or 100,000 ha.
- j. Watershed land area drained by a stream or fixed body of water and its tributaries having a common outlet for surface run-off. Watersheds with area of 10,000 ha and below are classified as small; watersheds with areas of more than 10,000 ha to 50,000 ha are medium-scale watersheds; and watersheds with areas above 50,000 ha. are large scale.

SECTION 5. Phases of PES for Water Use. PES Actors shall take into consideration during the process of designing, developing, initiating or implementing a PES scheme the following:

- a. **Matured site** Selected sites ready for PES implementation based on a given set of criteria as identified in the Toolkit (attached as Annex A).
- b. Negotiated transaction Subject to consultation, buyers and sellers shall agree to engage with each other to trade, in which both will be better off after the transaction just like in common market transactions. The details of the transaction should be expressed in the form of a written agreement or contract. The transaction shall not be considered as a form of taxation and not form part of the administrative fees charged by government agencies, but as a mechanism to charge PES.
- c. Well-defined ecosystem service the ecosystem service being bought and sold should be clear to both buyers and sellers and is clarified within the whole scheme of PES. This is equivalent to the goods and services being traded in a common market transaction.

In watershed/river basin context, for example, the good quality and volume of water enjoyed by lowland communities (i.e., households, farms, establishments, etc.) is a product of good forest management practices of

upland communities. Thus, the service provided by the upland communities should be rightfully compensated.

- d. Well-defined seller(s) Individuals, communities, LGUs or organizations considered as service providers or sellers implementing the management practice must ensure the ecosystem service delivery. It is important that sellers fully understand their role in providing the ecosystem service as it entails potential opportunity costs on their economic activities. Equally important is the seller's commitment to sustain its environmental management interventions for a continuous supply of the ecosystem service at hand.
- e. **Well-defined buyer(s)** All stakeholders that are impacted or benefitted by the ecosystem service should be part of the demand or the buyers. Just like in a common market transaction, beneficiaries express the value of the ecosystem service based on appropriate valuation tools. Buyers must also fully understand the ecosystem service being bought, including the agreements and proposed interventions for a continuous supply of the ecosystem service at hand.
- f. Continuous supply of ecosystem service the conditionality of PES is the continuity of transactions with buyers and sellers. Sellers need to continuously provide the ecosystem service so buyers will have an incentive to compensate for the ecosystem service that they get.

SECTION 6. PES Mechanism Development. The PES toolkit on water use, developed by the DENR, and attached as Annex A, shall guide the DENR Regional Offices, as well as local government units, and other organizations in leading the development of PES mechanisms. The LGUs are highly encouraged to follow the phases of PES mechanism development and undertake the prescribed activities per phase.

- **a. LGU-initiated.** PES on water use may be enforced by local government units through appropriate policies such as local executive orders or ordinances through the following possible schemes:
 - i. Incorporate PES provisions into local water supply systems by allocating an agreed percentage/amount reserved for ecosystem services or environmental protection from the collected fees; or
 - ii. Local ordinance shall be enacted on Payment for Ecosystem Services on Water Use (Annex B). LGUs may explore other schemes not mentioned in the guidelines as long as it fulfills the general considerations provided.

- iii. Inter-Local Government Units Cooperation. LGU PES schemes shall consider the ridge-to-reef approach or the interconnectedness of upstream and downstream ecosystems. LGUs of two or more political jurisdictions within the watershed or river basins are encouraged to enter into a partnership for the facilitation of the payment collection and administration. Cooperation may be enforced through appropriate mechanisms such as unified ordinances, Memorandum of Understanding/Agreement (MOU/A), joint resolutions, and other similar policies that would define an inter-LGU PES scheme including fund management and administration.
- b. Protected Areas (PAs). Protected Areas Management Boards (PAMBs) shall impose PES for water use generated within the PA. The payment shall be over and above existing fees imposed in Special Use Agreement in Protected Areas (SAPA) and other tenurial instruments within the PA.
- c. Ring-fencing mechanism. A ring-fencing mechanism shall be established for the funds collected for watershed/river basin management to ensure that these shall be used solely for the implementation of PES activities.

SECTION 7. Cost-recovery for Water Pricing. Cost-recovery shall be the basis for raw water pricing to ensure that the system will be self-sustaining through:

- i. Generation of revenue for capital recovery, operation and maintenance, extension of system;
- ii. Promotion of efficient water use:
- Protection of water quality resources through reduction of waste water discharge; and
- iv. Allow annual allocation/expenses for environment-related expenditures/allocations. Environmental and watershed protection indicators are accounted for through environmental protection cost ratio which measures the proportion of environmental protection cost to total cost, and the environment protection cost over revenues.

The PES rate shall be based on the cost of water use which shall account for the cost of water provisioning service. At the minimum, water users need to fully account for or internalize the total cost of watershed protection, restoration, management, and other social cost (such as provision of sanitary facilities to address water quality) in their cost of operations for the continued supply of water provisioning services. The cost recovery formula for watershed protection, restoration, and management is as follows:

Cost per cubic meter of water/year = Total cost for watershed protection, restoration, and management per year / Total available water per year (in cubic meters)

where,

Total Cost (TC) for watershed protection and management = [Protection Cost (PC) + Rehabilitation/Restoration Cost (RC) + Social Cost (SC) + Management Cost (MC)]

and,

Total available water per year (based on results of the hydrologic study) = total dependable flow or 80% based on NWRB threshold (Q80) + groundwater recharge (GW).

Using the above formula, the following NGP 2019 cost estimates and assumptions can be used for the cost recovery computation:

PC = Php $1,500/ha/year \times 5$ years x area in ha. of existing forests for protection

RC = (Php 19,700 x target ha. for ANR) + (Php 26,000 x target ha, for reforestation) + (Php 29,667 x target ha. for NTFP plantations) + (Php 30,500 x target ha. for agroforestry) + (Php 31,833 x target ha. for fruit trees) + (Php 25,640 x target ha. for bamboo) + (Php 25,841 x target ha. for soil and water conservation in agricultural areas)

SC = assuming 15% of the total cost for watershed protection, and restoration/rehabilitation = $[(PC + RC) \times 0.15]$

MC = 15% of total costs = $(0.15 \times total TC)$

SECTION 8. Roles and Responsibilities of the DENR and other PES Actors. The DENR and other PES Actors, in the process of designing, developing or implementing a PES scheme on water use, shall perform the tasks and functions as defined in this section.

The DENR shall amend and update the PES toolkit Financing River Basin and Watershed Management in the Philippines: A Guide in Developing Payments for Ecosystem Services Mechanisms for Water Users in Philippine Watersheds, and develop PES toolkits for other ecosystem services, whenever necessary.

8.1 Role of the DENR Central Office, Bureaus, Attached and Other Relevant Agencies. A DENR Steering Committee, to be chaired by the Assistant Secretary for Policy and Planning, shall be created and be composed of the Forest Management Bureau (FMB), Policy and Planning Service (PPS), National Water Resources Board (NWRB), Biodiversity Management Bureau (BMB), Ecosystems Research and Development Bureau (ERDB), Knowledge and Information Systems

Service (KISS), and River Basin Control Office (RBCO). This steering committee shall act as an oversight entity in the implementation of PES schemes.

8.2. DENR Regional Offices. The DENR Regional Offices shall act as catalysts in bringing PES actors to work together under a PES framework. The Regional Executive Directors shall create Technical Working Groups (TWG) to be chaired by the Assistant Regional Director (ARD) for Technical Services, with members from the EMB Regional Office, Regional Office technical divisions and the Provincial Environment and Natural Resources Officers (PENROs) and Community Environment and Natural Resources Officers (CENROs). Department of Interior and Local Government (DILG) representatives may be invited to become members of the TWG.

The composition of the TWG may be expanded if the PES Actors are located in more than one region. The TWG shall be co-chaired by the ARD/s for Technical Services of the other region/s concerned. Members from technical divisions and PENROs and CENROs shall also be included in the TWG.

The TWG shall perform the following functions:

- a. To identify feasible PES schemes in potential areas taking into consideration the presence of clearly identifiable ES buyers and sellers that can address the threat to ecosystem services when a transaction happens. Whenever necessary, knowledge providers may be engaged to support the development of PES schemes;
- b. To provide technical expertise, and work with other PES actors in developing transparent guidelines on a system/mechanism to collect and manage payments for watershed management activities;
- c. To build the capacities of LGUs, communities or the private sector to engage in discussions to develop a PES scheme, and assist in the development and implementation of a governing structure, if applicable, for making decisions and resolving disputes as regards PES design and implementation; and
- d. To monitor and evaluate changes in ecosystem extent, condition and capacity where PES schemes are implemented, organize a periodic review of PES initiatives in the region, and submit a report annually on the status of PES implementations, including recommendations on how to improve PES mechanisms, to the DENR PES Steering Committee Chair, copy furnished the FMB, PPS, NWRB, BMB, ERDB, KISS and RBCO for inclusion in the PES database.

The TWG may tap the expertise of knowledge providers in performing the above-mentioned functions. They are likewise tasked to ensure that the generated

revenue payments made are used exclusively for the protection, management and restoration cost of the watershed and not for any other purposes.

The Conservation and Development Division (CDD) of the regions concerned shall serve as the Secretariat of the TWG.

In cases where there are existing management bodies such as the Watershed Management Councils, River Basin Management Councils (RBMCs), PAMBs and Water Quality Management Areas (WQMAs) Boards, among others. The TWGs of these management bodies shall act as the TWG for PES, to initiate bringing PES actors to work under a PES framework as an alternative to the creation of a TWG. The TWG shall orient these existing management bodies on PES principles and mechanisms.

- **8.3. Ecosystem Services Sellers.** The ES Sellers shall perform the following roles and responsibilities:
 - a. Participate in discussions and negotiations of PES agreements, including specific actions that will be incentivized by the scheme.
 - b. Contribute to the updating of existing, relevant ENR management plans with assistance from DENR and Knowledge Providers, in accordance with an agreed PES scheme; and
 - c. Use the payments, rewards, and other non-fiscal incentives received from PES schemes effectively, efficiently, and appropriately in implementing activities that maintain or enhance the delivery of ecosystem services in watersheds.
- **8.4 Ecosystem Services Buyers**. The ES Buyers shall perform the following roles and responsibilities:
 - a. Participate in discussions and negotiations pertaining to the establishment of PES mechanisms in areas from which they derive benefits through the water provision/regulation ecosystem services provided by the watersheds/river basins; and
 - b. Provide payments, rewards, or other non-fiscal incentives to the ES sellers (directly or through intermediaries) to maintain/improve the level of ecosystem services that they are using.
 - **8.5 Intermediaries.** The intermediaries shall perform the following functions:
 - a. Assist sellers in the assessment of an ecosystem service product and its value to prospective buyers;
 - b. Introduce buyers and sellers and build rapport between them;
 - c. Establish ecosystem service baselines and additionality;

- d. Identify specific resource management interventions that will deliver service provision; and
- e. Organize multiple landowners/managers for more complex schemes.
- **8.6 Knowledge Providers.** The knowledge providers shall perform the following roles and responsibilities:
 - a. Provide technical assistance and other support services to the PES actors for the development of PES schemes;
 - b. Conduct research for the continuing improvement of the PES scheme;
 - Make available information, studies and data relevant to watershed;
 and
 - d. Impart relevant available information, studies and data pertinent to watersheds to the TWG/existing management bodies, PES Actors and other stakeholders.

SECTION 9. Capacity Building and Communication, Education and Public Awareness (CEPA) Plan. Training Modules adopted to the specific needs of the PES Actors of each region shall be developed by the Regional TWG or the existing management body. The DENR Human Resource Development Service (HRDS) shall facilitate capacity-building activities while the DENR Steering Committee through the Strategic Communications and Initiatives Service (SCIS) shall guide the regional and field offices in developing PES communication campaign strategies.

The Regional TWG, or the existing management body, shall set up enabling conditions for PES Actors to collaborate and cooperate in encouraging biodiversity conservation and sustainable use through building relationships and underpinning learning processes during PES implementation. Campaigns, policies, regulations and incentives across sectors designed and/or drafted for the purpose of PES shall reflect the local context, culture and tradition of the stakeholders.

SECTION 10. Monitoring, Evaluation and Reporting. The DENR Steering Committee created under Section 7.1 shall be responsible for the monitoring and evaluation of the PES implementation on the ground. The Committee shall validate reported accomplishments and submit recommendations to Undersecretary for Policy and Planning on how the PES scheme can be further improved. The results of the monitoring and evaluation shall be made available to all the actors to ensure transparency, legitimacy and accountability.

SECTION 11. PES Initiatives Database. The Knowledge and Information Systems Services - Statistics and Data Resource Management Division (KISS-SDRMD) shall create and maintain a database of all PES initiatives in the Philippines including lessons learned and good practices as well as status reports from the regional TWGs and/or existing management bodies for monitoring and knowledge

management purposes. Such information shall be made available to the stakeholders concerned.

SECTION 12. Funding. The Department shall allocate funds for PES-related activities, such as but not limited to capacity building, monitoring and evaluation, initial transaction cost to implement PES and provision of technical assistance to PES Actors in the implementation of PES schemes in the Philippines. However, other institutions may also be tapped for possible funding of PES schemes such as LGUs, donor agencies, other national government agencies, and interested private entities.

SECTION 13. Separability Clause. If any provision of this Order shall be held invalid or unconstitutional, the other portions or provisions hereof which are not affected shall continue in full force and effect.

SECTION 14. Repealing Clause. All Orders and other similar issuances inconsistent herewith are hereby revoked, amended, or modified accordingly.

SECTION 15. Effectivity Clause. This Order shall take effect fifteen (15) days after its publication in a newspaper of general circulation and upon acknowledgement of the receipt of the copy thereof by the Office of the National Administrative Register (ONAR).

MARIA ANTONIA YULO LOYZAGA Secretary