

THE MINISTRY OF ENVIRONMENT AND FORESTRY OF THE REPUBLIC OF INDONESIA

REGULATION OF THE MINISTER OF ENVIRONMENT AND FORESTRY OF THE REPUBLIC OF INDONESIA

NUMBER P.14 / MENLHK / SETJEN / KUM.1 / 2/2017

CONCERNING

PROCEDURES FOR THE INVENTORY AND DESIGNATION OF FUNCTIONS OF PEATLAND ECOSYSTEM

BY THE GRACE OF GOD ALMIGHTY

THE MINISTER OF ENVIRONMENT AND FORESTRY OF THE REPUBLIC OF INDONESIA,

- Considering a. Whereas in order to enhance the efforts for : the protection of vulnerable and damaged functions of a Peatland Ecosystem, shall be required protection measures to ensure the ecological functions of the Peatland Ecosystem in support of biodiversity conservation, water management so that the functions of carbon reserve storage, oxygen producers and climate balances can be maintained;
 - b. Whereas pursuant to the provisions of Articles 8 and 13 of Government Regulation

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Number 71 of 2014 concerning Protection and Management of Peatland Ecosystem as amended by Government Regulation Number of 2016 concerning Amendment 57 to Government Regulation Number 71 of 2014 concerning Protection and Management of Peatland Ecosystem, in the framework of Ecosystem Peatland and management planning, shall be needed procedures for the inventory of Peatland Ecosystem and Designation of the functions of Peatland

- c. Whereas based on the considerations as referred to in letter a and letter b, it is necessary to stipulate Regulation of the Minister of Environment and Forestry concerning Procedures for the Inventory and Designation Functions Peatland of of Ecosystem;
- In View of 1. Law Number 41 of 1999 concerning Forestry : (State Gazette of the Republic of Indonesia of 1999 Number 167, Supplement to the State Gazette of the Republic of Indonesia Number 3888) as amended by Law Number 19 of 2004 concerning Stipulation of Government Regulation in Lieu of Law Number 1 of 2004 concerning Forestry as a Law (State Gazette of the Republic of Indonesia of 2004 Number 86, Supplement to the State Gazette of the Republic of Indonesia Number 4412);
 - Law Number 32 of 2009 concerning Environmental Protection and Management (State Gazette of the Republic of Indonesia of 2009 Number 140, Supplement to the State Gazette of the Republic of Indonesia Number 5059);

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Ecosystem;

- 3. Law Number 23 of 2014 concerning Regional Government (State Gazette of the Republic of Indonesia of 2014 Number 244, Supplement to the State Gazette of the Republic of Indonesia Number 5587) as has been amended several times, lastly by Law Number 9 of 2015 concerning Second Amendment to Law Number 23 of 2014 concerning Regional Government (State Gazette of the Republic of Indonesia of 2015 Number 58, Supplement to the State Gazette of the Republic of Indonesia Number 5679);
- 4. Law Number 39 of 2014 concerning Plantation (State Gazette of the Republic of Indonesia of 2014 Number 308, Supplement to the State Gazette of the Republic of Indonesia Number 5613);
- 5. Government Regulation Number 27 of 2012 concerning Environmental Permit (State Gazette of the Republic of Indonesia of 2012 Number 48, Supplement to the State Gazette of the Republic of Indonesia Number 5285);
- 6. Government Regulation Number 71 of 2014 concerning Protection and Management of Peatland Ecosystem (State Gazette of the Republic of Indonesia of 2014 Number 209, Supplement to the State Gazette of the Republic of Indonesia Number 5580) as amended by Government Regulation Number 57 of 2016 concerning Amendment to Government Regulation Number 71 of 2014 concerning Protection and Management of Peatland Ecosystem (State Gazette of the Republic of Indonesia of 2016 Number 260, Supplement to the State Gazette of the Republic of Indonesia Number 5957);

- 7. Presidential Regulation Number 16 of 2015 concerning the Ministry of Environment and Forestry (State Gazette of the Republic of Indonesia of 2015 Number 17);
- 8. Regulation of the Minister of Environment and Forestry Number P.18 / Menlhk-II / 2015 concerning Organization and Working Procedures of the Ministry of Environment and Forestry (State Gazette of the Republic of Indonesia of 2015 Number 713);

HAS DECIDED

To Stipulate : REGULATION OF THE MINISTER OF ENVIRONMENT AND FORESTRY CONCERNING PROCEDURES FOR THE INVENTORY AND DESIGNATION OF FUNCTIONS OF PEATLAND ECOSYSTEM.

CHAPTER I GENERAL PROVISIONS

Article 1

Referred to herein as:

- 1. Peatland shall be naturally formed organic materials of plant residues decomposed imperfectly with a thickness of 50 (fifty) centimeters or more and accumulates in swamps.
- 2. Peatland Ecosystem shall be the combination of Peatland elements which shall be a whole unified entirety that influences each other in forming balance, stability, and productivity.
- 3. Peatland Hydrological Unity shall be a Peatland Ecosystem located between 2 (two) rivers, between a river and a sea, and / or at a swamp.
- 4. Peatland Hydrological Unity Map shall be a map informing the location, existence and area of a Peatland Ecosystem.

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- 5. Peatland Ecosystem Inventory shall be an activity undertaken to know and obtain data and information on the characteristics of a Peatland Ecosystem.
- 6. Peatland Ecosystem Functions shall be the structure of Peatland elements that serve to protect water availability, biodiversity conservation, oxygen-producing carbon reserve, climate balance divided into protection functions of Peatland Ecosystem and cultivation functions of Peatland Ecosystem.
- 7. Protection Functions of Peatland Ecosystem shall be the structure of Peatland elements that have certain characteristics primarily functioning as water protection and balance, carbon reserve storage and biodiversity conservation in order to preserve the function of the Peatland Ecosystem.
- 8. Cultivation Functions of Peatland Ecosystem shall be the structure of Peatland elements that have certain characteristics with the functions to support the productivity of a Peatland Ecosystem through cultivation activities according to its carrying capacity to preserve the functions of the Peatland Ecosystem.
- 9. Germplasm shall be a substance of carrying hereditary characteristics that can be either whole organ or part of a plant or an animal and microorganisms.
- 10. Peatland Dome shall be an area of a Peatland Hydrological Unity that has a higher topography / relief than the surrounding area, so that it naturally has the ability to absorb and keep more water and to supply water to the surrounding area.
- 11. Groundwater Level in Peatland shall be the depth of groundwater measured from the surface of Peatland soil.
- 12. Transect shall be an observation route either longitudinal or transversal by observing the hydrological pattern of the network and the relief of land surface, which shall be used in field sampling.

- 13. Observation Sampling Point shall be a point chosen as the location for observing the characteristics of a Peatland Ecosystem, which has representativeness from each location of a Peatland Hydrological Unity.
- 14. Drainage Map shall be a map that presents natural and / or artificial drainage information at a Peatland Ecosystem.
- 15. Landscape Map shall be a thematic map that contains information of land formation on the surface of the earth.
- 16. Work Map shall be a land unit map that shall be a combination of landscape map and other thematic maps required to make transects and field measurement points.
- 17. One Map Policy shall be a policy that governs mapping implementation by using a single reference, standard, database, and geoportal in order to achieve accurate, accessible, and accountable data.
- 18. Watershed Area hereinafter abbreviated as DAS shall be a land area which shall be a unity with a river and its tributaries, which functions to accommodate, keep, and drain water from rainfall to lake or sea naturally, whose land boundary shall be a topographical separator and marine boundary shall be to the extent of water areas which are still affected by land activities.
- 19. Regional Spatial Plan hereinafter abbreviated as RTRW shall be the outcomes of spatial planning in a region.
- 20. Territory shall mean a space which shall be a geographical entity together with all related elements whose boundaries and systems shall be determined administratively and / or functionally.
- 21. Peatland Ecosystem Protection and Management Plan shall be a written document within a certain period which contains systematic and integrated efforts undertaken to preserve the functions of a Peatland Ecosystem and prevent the occurrence of

Peatland Ecosystem damage which includes planning, utilization, controlling, maintenance, supervision and law enforcement.

- 22. Minister shall be the minister who conducts government affairs in the field of environmental protection and management.
- 23. Director General shall be the director general responsible for pollution control and environmental damage.

Article 2

This Ministerial Regulation shall aim to govern the procedures for the inventory and designation of the functions of Peatland Ecosystems as the materials in the formulation of the Peatland Ecosystem protection and management plans.

Article 3

The scope of this Ministerial Regulation shall govern the procedures for the following:

- a. inventory and designation of the final map of Peatland Hydrological Unities;
- b. Designation of the functions of Peatland Ecosystems; and
- c. changes in the Designation of the functions of Peatland Ecosystems.

CHAPTER II PROCEDURES FOR THE INVENTORY OF PEATLAND ECOSYSTEM

Part One General Provisions

Article 4

The formulation of a Peatland Ecosystem inventory shall use the following data and information:

- a. indicative map of the national Peatland Ecosystem dispersal as contained in the Appendix of Government Regulation Number 71 of 2014 concerning Peatland Ecosystem Protection and Management as amended by Government Regulation Number 57 of 2016 concerning Amendment to Government Regulation Number 71 of 2014 concerning Peatland Ecosystem Protection and Management;
- national Peatland map scaled 1: 250,000 (one to two hundred and fifty thousand) issued by the Indonesian Center for Agricultural Land Resources (BBSDLP) of the Ministry of Agriculture;
- c. map of river hydrological networks and elevation contours derived from a 1: 250,000(one to two hundred fifty thousand) scaled Geomorphologic Map.
- d. land cover maps generated from medium-resolution remote sensing images;
- e. 30 meter (30) meter elevation model (DEM) maps resulting from medium-resolution non-optical satellite imagery;
- f. landform map derived from land system map (RePPProT);
- g. Watershed (DAS) map; and
- h. other legitimate sources in the geo-spatial mapping methodology according to the regulations which have substantial relevance.

Part Two

Implementation of the National Peatland Ecosystem Inventory and Designation of the National Peatland Hydrological Unity Map

Article 5

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- (1) The Government through the Director General shall organize the national Peatland Ecosystem inventory.
- (2) The implementation of the Peatland Ecosystem inventory shall be conducted by identifying the Peatland areas based on the data and information as referred to in Article 4.
- (3) Based on the inventory of the Peatland area as referred to in paragraph (2), the boundaries of the Peatland Hydrological Unity shall be delineated by observing the following:
 - a. boundary area around the Peatland located in 2 (two) main rivers / ordo-1;
 - b. land surface altitude pattern based on DTM / SRTM data with 30 (thirty) meter resolution; and
 - c. DAS boundary.
- (4) In the absence of the characteristics as referred to in paragraph(3), the delineation of the Hydrological Unit boundaries shall be carried out using the land system data.

- Based on the result of the map delineation as referred to in Article
 shall be conducted field surveys to verify the existence of the Peatland Hydrological Unity.
- (2) Based on the verification result as referred to in paragraph (1), the Director General shall prepare the final map of the Peatland Hydrological Unity.
- (3) The final map of the National Peatland Hydrological Unity as referred to in paragraph (2) shall be presented on a minimum scale of 1: 250,000 (one to two hundred and fifty thousand).

Article 7

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- (1) With respect to the maps as referred to in Articles 5 and 6, for the preparation of the functions of the Peatland Ecosystem for the purpose of environmental governance, the mapping rules shall be evaluated by the director general in charge of forestry and environmental governance.
- (2) The final document of the map for the basis of the preparation of the Peatland Ecosystem functions shall be approved by the Director General and the director-general in charge of forestry and environmental governance, to be designated as the map of the Peatland Hydrological Unity by the Minister.

- (1) The Director General shall convey the draft decree for the Designation of the Hydrological Unity of Peatland and the attachment map to the Minister.
- (2) Based on the recommendation of the Director General, the Minister shall determine the Peatland Hydrological Unity and map of the Peatland Hydrological Unity.

Part Three

Procedures for the Designation of the Functions of Peatland Ecosystem

Article 9

- (1) The Map of the Peatland Hydrological Unity that has been determined by the Minister as set forth in Article 8 paragraph (2) shall be used as a reference to determine the functions of the Peatland Ecosystem.
- (2) The functions of the Peatland Ecosystem as referred to in paragraph (1) shall include:

a. Protection functions of the Peatland Ecosystem; and

b. Cultivation functions of the Peatland Ecosystem.

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- (1)The Designation of the protection functions of Peatland Ecosystem as referred to in Article 9 paragraph (2) letter a shall be conducted based on the criteria that include:
 - a. Peatland with a minimum depth of 3 (three) meters;
 - b. Peatland in protected areas outside forest areas, protected forests and conservation forests as defined in the Regional Spatial Plan; and
 - c. Peatland ecosystems determined for utilization moratorium under the legislations.
- (2)The Peatland Ecosystem area shall be minimally 30% (thirty percent) of the entire Hydrological Peatland Unity, starting from 1 (one) or more Peatland dome peaks.
- (3) The Peatland dome peak shall be determined by considering the Peatland depth and Peatland surface height.

Article 11

The Peatland Ecosystem with cultivation functions as referred to in Article 9 paragraph (2) letter b, shall be determined on areas within the Peatland Hydrological Unity outside the criteria of Protection functions of Peatland Ecosystem as referred to in Article 10.

Article 12

(1)Based on the result of the Designation of the protection functions and cultivation functions of the Peatland Ecosystem as referred to in Article 10 and Article 11, the Director General shall prepare the map for the Designation of the functions of the national Peatland Ecosystem with a minimum scale of 1: 250,000 (one to two hundred and fifty thousand).



- (2) The Director General shall convey the draft decree for the Designation of the functions of the Peatland Ecosystem and the attachment map to the Minister.
- (3) Based on the recommendation of the Director General as referred to in paragraph (1), the Minister shall determine the decision for the Designation of the functions of the Peatland Ecosystem and map of the functions of the Peatland Ecosystem.

Part Four Implementation of Provincial and Regency / City Peatland Ecosystem Inventory

Article 13

- (1) The implementation of the provincial and regency / city Peatland Ecosystem inventory shall be based on the national Peatland Ecosystem inventory results as referred to in Article 8.
- (2) The implementation of the provincial and regency / city Peatland Ecosystem inventory as referred to in paragraph (1) shall be conducted to obtain higher accuracy and intensity or depth of data / map information on Peatland Ecosystem using:
 - a. Indonesia's landform map scaled 1: 50,000 (one to fifty thousand);
 - b. interpretation maps of high resolution remote sensing images; and
 - c. field survey results.
- (3) Based on the results of the inventory as referred to in paragraph(2), shall be delineated the boundaries of the provincial and regency / city Hydrological Unit.

Article 14

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- (1) The field survey as referred to in Article 13 paragraph (2) letter c shall be performed to obtain physical, chemical, biological, hydrophotography data, and types of sediment beneath the Peatland by grid systematic observation method composed of longitudinal and transversal transects:
 - a. the distance between longitudinal transects shall be 2 (two) kilometers, with the observation distance between points of 500 (five hundred) meters;
 - b. the distance between transversal transects shall be 3 (three) kilometers, with the observation distance between points of 1,000 (one thousand) meters; and
 - c. the starting point of both transects shall be determined from one of the dome peaks.
- (2) From the results of the field survey as referred to in paragraph (1) shall be obtained the following data and information:
 - a. location, existence, and area of the Peatland Hydrological Unity;
 - b. physical, chemical, biological, hydro topography, and sediment characteristics beneath the Peatland that include:
 - 1. observation point or coordinates location;
 - 2. elevation or height of the observation coordinates;
 - 3. ground water, puddles, or floods;
 - 4. land cover, land use, and condition;
 - 5. existence of protected flora and fauna;
 - 6. natural and artificial drainage conditions;
 - 7. water quality;
 - 8. types of overflow;
 - 9. Peatland thickness;
 - 10. proportion of the weight of Peatland materials;
 - 11. development of Peatland condition or level of damage;
 - 12. substrate characteristics beneath the Peatland layer; and
 - 13. soil characteristics and pyrite layer depth.
- (3) Field survey and inventory of the characteristics of the Peatland Ecosystem in a business area and / or activity shall be mandatory to the person in charge of business and/or activity under the supervision of the Director General.

- (4) Based on the data and information at the observation points as referred to in paragraph (2), shall be done interpolation analysis between the points of observation to produce spatial information that shall include the following:
 - a. Peatland Ecosystem boundary;
 - b. boundaries per characteristic of the Peatland Ecosystem; and / or
 - c. boundaries of the combined characteristics of the Peatland Ecosystem.
- (5) The boundaries of the Peatland Ecosystem as referred to in paragraph (4) sub-paragraph a shall be presented as a provincial Peatland Hydrological Unit scaled 1: 50,000 (one to fifty thousand).
- (6) The boundaries of the Peatland Ecosystem functions shall be prepared using spatial information per characteristic and / or combination of the characteristics of the Peatland Ecosystem as referred to in paragraph (4) letter b and letter c, presented in the form of a provincial and local Peatland Ecosystem function map scaled 1: 50,000 (one to fifty thousand).
- (7) In the event that other agencies or person in charge of the business and / or activity have conducted field surveys which produce data on the characteristics of the Peatland Ecosystem, the data may be used after verification by the Director General.

- (1) The Director General shall convey draft decree on the Designation of the functions of the provincial and regency / city Peatland Ecosystem and the attachment map of to the Minister.
- (2) Based on the recommendation of the Director General as referred to in paragraph (1), the Minister shall determine the decision on

the Designation of the provincial and regency / city Peatland Ecosystem functions.

CHAPTER III

PROCEDURES FOR CHANGING THE DESIGNATION OF FUNCTIONS OF PEATLAND ECOSYSTEM

Article 16

- (1) The Peatland Ecosystem with cultivation functions as referred to in Article 11 may be converted into a Peatland Ecosystem with protection functions.
- (2) Changes in the function of the Peatland Ecosystem as referred to in paragraph (1) shall be made in the cases as follows:
 - a. there are still Peatland Ecosystems that meet the provisions as referred to in Article 10;
 - b. there is ecological urgency to undertake efforts to prevent or restore environmental damage to and / or around the Peatland Ecosystem;
 - existence of ecological urgency to do reserve measures of the Peatland Ecosystem in the province or regency / city; and / or
 - d. outside 30% (thirty percent) of the entire area of the Peatland Hydrological Unity as referred to in Article 10 paragraph (2), there are still:
 - 1. protected species in accordance with the provisions of laws and regulations; and / or
 - 2. Peatland ecosystems located in a protected area as stipulated in the amendment to the Regional Spatial Plan.

Article 17

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- (1) The Minister shall change the functions of the Peatland Ecosystem as referred to in Article 16 paragraph (1):
 - a. based on the requirement according to criteria as referred to in Article 16 paragraph (2); or
 - b. based on the recommendation of the Provincial Government or Regency / City Government upon approval of the Director General.
- (2) Changes in the function of the Peatland Ecosystem as referred to in paragraph (1) shall be stipulated by the Minister after coordinating with:
 - a. the minister in charge of government affairs in the field of water resources;
 - b. the minister in charge of government affairs in spatial planning;
 - c. relevant ministers; and / or
 - d. Provincial Government, and / or Regency / City Government.
- (3) The implementation of the matters as referred to in paragraph (2) shall be prepared and executed technically by the Director General and shall be reported continuously to the Minister.

- (1) The Director General shall convey the draft decree on the change of functions of the Peatland Ecosystem and the attachment map to the Minister.
- (2) Based on the draft decree as referred to in paragraph (1), the Minister shall determine the change of functions of the Peatland Ecosystem and the attachment map.

Article 19

(1) Change of boundary of a Peatland Ecosystem with protection functions, as well as cultivation function may occur, thickening of depth of map data / information from 1: 250,000 (one to two

hundred and fifty thousand) small scale map to large scale 1: 50,000 map (one to fifty thousand).

(2) The implementation of the Peatland Ecosystem function recovery shall be based on a large-scale map of 1: 50,000 (one in fifty thousand).

CHAPTER IV FINANCING

Article 20

Any costs incurred by the implementation of this Ministerial Regulation shall be charged to:

- a. the State Budget (APBN);
- b. Regional Budget (APBD); and / or
- c. Other legitimate and non-binding sources of financing in accordance with the provisions of the legislations.

CHAPTER V

GUIDANCE, SUPERVISION, AND SANCTIONS

Article 21

- (1) A Peatland ecosystem with protection or cultivation functions shall be given treatments in accordance with the provisions of the legislations.
- (2) The Minister and provincial and regency / city governments in accordance with their authority shall conduct guidance and supervision over the implementation of the protection and cultivation functions of the Peatland Ecosystem conducted by the work units of the government, the community and person in charge of business and/or activities in accordance with the legislations.
- (3) The guidance on the implementation as referred to in paragraph(2) in the community area shall be carried out by the relevant working units of the Government and / or Regional Government

in accordance with their duties and functions, and shall be monitored by the Minister and the Provincial Government and regency / city governments according to their authority.

- (4) In the implementation as referred to in paragraph (2), the person in charge of business and / or activity shall revise the Business Plan (RKU), Business Plan Document, Management Plan Document or the like to be adjusted with this Ministerial Regulation, with reference to the guidance and supervision by the director general in charge of the management of sustainable production forests.
- (5) The person in charge of business and / or activity shall apply for amendment to the Environmental Permit as a result of the change of the function of the Peatland Ecosystem in accordance with this Ministerial Regulation, with reference to the guidance and supervision by the director general in charge of forestry and environmental planning or work unit of provincial and regency / city Governments in charge of the environment.
- (6) Violations of the provisions in the implementation as referred to in paragraph (2), paragraph (4) and paragraph (5) by the person in charge of business and/or activity shall be subject to administrative sanctions in accordance with the provisions of the legislations.

CHAPTER VI TRANSITIONAL PROVISIONS

Article 22

At the time of the entry into force of this Ministerial Regulation, the Person in charge of business and / or activity whose working area is bigger than more than or equal to 40% (forty per cent) shall be designated as a Peatland Ecosystem with protection functions, on the consideration of business continuity and benefits to the community may apply for land swap to the Government.

CHAPTER VII CLOSING PROVISIONS

Article 23

This Ministerial Regulation shall come into force as of its promulgation date.

For public cognizance, hereby ordering the promulgation of this Ministerial Regulation by publishing it in the State Gazette of the Republic of Indonesia.

> Stipulated in Jakarta on February 9, 2017 THE MINISTER OF THE ENVIRONMENT AND FORESTRY OF THE REPUBLIC OF INDONESIA,

Signed

SITI NURBAYA

Promulgated in Jakarta on February 27, 2017

DIRECTOR GENERAL OF LEGISLATION OF THE MINISTRY OF LAW AND HUMAN RIGHTS OF THE REPUBLIC OF INDONESIA,

Signed

WIDODO EKATJAHJANA

ANANG FAHKCRUDIN SWORN & AUTHORIZED TRANSLATOR SK. GUB KDKI JKL. NO. 2220/2001

OFFICIAL GAZETTE OF THE REPUBLIC OF INDONESIA OF 2017 NUMBER 336

Issued as true copy

HEAD OF LEGAL BUREAU,

Signed

KRISNA RYA

I, Anang Fahkcrudin, a sworn and authorized translator, by virtue of Jakarta Capital Territory Governor's Decree No. 2228/2011, practicing in Jakarta, April 23, 2018 do solemnly and sincerely declare that the foregoing document is a true and faithful translation from Indonesian into English of the original version CRUDT N

