

Republic of the Philippines Department of Environment and Natural Resources FOREST MANAGEMENT BUREAU

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MEMORANDUM

FOR

The Regional Executive Director DENR Region MIMAROPA

Roxas Boulevard, Metro Manila

ATTN

The Assistant Regional Director for Technical Services

FROM

The Assistant Secretary for Policy, Planning, and Foreign Assisted and

Special Projects and Director, in concurrent capacity and

Chair, Watershed Multisectoral Technical Evaluation Committee

(WMTEC)

The Director, Policy and Planning Service and

Co-Chair, Watershed Multisectoral Technical Evaluation Committee

(WMTEC)

SUBJECT

COMMENTS ON THE CHARACTERIZATION CUM VULNERABILITY ASSESSMENT REPORTS OF MAG-ASAWANG TUBIG AND BANSUD RIVER WATERSHEDS IN

DENR MIMAROPA

DATE

MAY 14 2021

This pertains to the Characterization cum Vulnerability Assessment Reports of Mag-Asawang Tubig and Bansud River Watersheds. Review and evaluation of the aforementioned reports disclosed the following general comments and recommendations (for the detailed comments and recommendations, please see attached Annex):

- 1. Please follow the outline indicated in Annex B of DMC 2008-05, also known as "Guidelines in the Preparation of Integrated Watershed Management Plans".
- 2. It was indicated that the area of Mag-Asawang Tubig River Watershed and Bansud River Watershed are 43,534.24 and 8,474.87 hectares, respectively. However, based on the IFSAR-LIDAR delineated boundary, the total area of Mag-Asawang Tubig and Bansud River Watersheds are 43,794 and 8,464 hectares, respectively.
- 3. Analysis and discussion on the Vulnerability Assessment of Mag-Asawang Tubig River Watershed is lacking.
- 4. Both reports did not follow the ERDB VA Outline Report and standard map layout.

Foregoing considered, the submitted Characterization cum Vulnerability Assessment Reports of Mag-asawang Tubig and Bansud River Watersheds are requested to be revised based on the comments and recommendations of the Watershed Multisectoral Technical Evaluation Committee (WMTEC) prior to the preparation of their respective Integrated Watershed Management Plans.

MELINDA C. CAPISTRANO

Director, Policy and Planning Service

MARCIAL C. AMARO, JR., CESO III

Assistant Secretary for Policy, Planning and Foreign Assisted and Special Projects, and Director, in concurrent capacity

Copy Furnished:

The Undersecretary for Field Operations and Environment

ANNEX

A. MAG-ASAWANG TUBIG RIVER WATERSHED

FMB

- The document should be entitled "Watershed Characterization cum Vulnerability
 Assessment Report of Mag-Asawang Tubig River Watershed". The outline and
 discussions indicated in DMC 2008-05, also known as "Guidelines in the Preparation
 of Integrated Watershed Management Plans" should be followed.
- 2. On page 6, it was indicated that the area of Mag-Asawang Tubig River Watershed is 43,534.24 hectares. However, based on the IFSAR-LIDAR delineated boundary, the total area of the said watershed is 43,794 hectares.
- On page 8, under "B. Topography/Geo-morphological Features", please show/include
 the values used in the computation of the geo-morphological features. For example, in
 Gravelius Form Factor, show and discuss the value of the basin length and average
 width of the watershed.
- 4. On page 21, under "D. Soil", discuss the essential features of the soil such as soil texture, soil structure, bulk density and permeability, soil fertility, and soil depth. Also include the assessment of soil characteristics relative to the suitability of an area for crop production.
- On item "I. Flora and Fauna", please include computation and analysis on the biodiversity indices. The scientific names in Tables 15 (page 38) and 16 (page 40) should be italicized.
- On pages 46-27, please include a table or graph showing the number of population segregated by sex, age which should be distributed in the watershed area, by barangay.
- 7. On pages 48, under "3. Livelihood and Income/Profile/Sources", please discuss the average annual household income per municipality and primary sources of livelihood in the community.
- 8. On page 49, under "5. Employment Pattern and Projection", please indicate the current employment and unemployment status opportunities and projections up to next the 10 years.
- 9. On page 50, under "8. Tourism and Recreation", please specify the tourist spots mentioned in the discussion. Under "b. Social Organization", discuss accredited or non-accredited NGOs within the area and the services rendered and extended to people in community development projects. Please also indicate the dialects spoken by the people.

ERDB

- 1. The process/ procedure in vulnerability assessment was missing in the report. It was not discussed A schematic diagram of the process can be included in the report.
- 2. Some parts of the report were lifted from a completed ERDB study report, this should be properly cited.
- 3. It is advised to regenerate the VA map to the flooding following the procedure in the FMB TB 16-A.
- 4. Analysis and discussion on VA is lacking.

- 5. Follow the ERDB VA Outline Report.
- 6. Follow the standard map layout.
- 7. Use PAGASA projections (2030 and 2050) in generating VA to flooding and compare the generated results with the baseline information.
- 8. Maps (potential impact; adaptive capacity assessment and VA maps) were lacking in the report.

PPS

 Please include more discussion and map outputs on the possible exposure of the communities and ecosystems with respect to identified hazards in the Mag-asawang Tubig Watershed.

B. BANSUD RIVER WATERSHED

FMB

- 1. Please follow the outline indicated in Annex B of DMC 2008-05, also known as "Guidelines in the Preparation of Integrated Watershed Management Plans".
- 2. The report indicates that the area of Bansud River Watershed is 8,474.87 hectares. However, based on the IFSAR-LIDAR delineated boundary, the total area of the said watershed is only 8,464 hectares.
- 3. The attached maps are not readable. It is suggested that map figures should occupy an entire page and map packages be included in the submission of the report.
- 4. On items "2.1.4.2 Soil Structure", "2.1.4.3 Bulk Density and Permeability" and "2.1.4.5 Soil Fertility, Soil Depth and Other Related parameters", please provide the mentioned soil structural grades and soil samples of Bansud River Watershed.
- 5. On item "2.1.4.4 Soil Erosion", please identify the priority areas requiring immediate attention and relate erosion condition with the suitability of land uses and the effectiveness of various conservation strategies.
- 6. On item "2.1 Biological Resources", please include computation and analysis on the biodiversity indices.
- 7. On item "2.3.1 Population Density", the population density should be rounded off to the nearest whole number (e.g. 10.33 persons should be 10 persons per hectare).

ERDB

- Thematic maps to be reclassified from the characterization can be annexed at the end of the VA report.
- 2. Geology is not a parameter in assessing soil erosion vulnerability.
- 3. Include an analysis of the results generated for soil erosion and landslide.
- 4. For the VA to landslide, use the MGB geo-hazard map as base map overlaying the adaptive capacity map (from ERDB).
- 5. The report is not complete. There were no discussion on landslide vulnerability, mitigating measures and recommendations.
- 6. Follow the ERDB VA Outline Report.
- 7. Follow the standard map layout.
- 8. Use PAGASA projections (2030 and 2050) in generating VA to flooding and compare the generated results with the baseline information.

9. Maps (potential impact; adaptive capacity assessment and VA maps) were lacking in the report.

PPS

 On Chapter II, the facts presented should be spatially presented and identified for easier analysis in Chapter III (Vulnerability Assessment). Please provide more discussion on the sensitivity, exposure and adaptive capacity of the communities and ecosystem as required in the FMB Technical Bulletin 16-A.

LMB

- Please include the number of titled lands (alienable and disposable) in terms of hectares that are within the watershed.
- 2. Kindly correct the table number under Section 2.1.5. It should be Table 2.1.25.
- 3. Also consider the Ancestral Domains Sustainable Development and Protection Plan (ADSDPP), if available, of the Buhid and Bangon Mangyans in the crafting of the Watershed management Plan since most of the area within the watershed is covered by CADC 130. As mentioned in the draft report, the support from the Ips is crucial for the success of the programs in the watershed.



Department of Environment and Natural Resources Ecosystems Research and Development Bureau

FOREST MANAGEMENT BUREAU

January 15, 2021

MEMORANDUM

RECORDS UNIT

FOR

Chairman

Watershed Multisectoral Technical Evaluation Committee

(WMTEC)

Forest Management Bureau

FROM

The Director

SUBJECT

COMMENTS ON THE WATERSHED CHARACTERIZATION

M VULNERABILITY ASSESSMENT REPORT

SUBMITTED BY DENR MIMAROPA

This has reference to your memorandum requesting for comments on the Watershed Characterization cum Vulnerability Assessment Reports of Bansud and Mag-asawang Tubig River Watershed in MIMAROPA. Please find attached comments on the said reports.

FOR YOUR INFORMATION AND CONSIDERATION.

College, 4031, Laguna, Philippines
Tel Nos: (6349)5363628; 5362229; 5362269 Fax No. (6349)5362850
E-mail: erdb@denr.gov.ph

Bansud River Watershed

Comments and suggestions:

Vulnerability Assessment

- Thematic maps to be reclassified from the characterization can be annexed at the end of the VA report.
- 2. Geology is not a parameter in assessing soil erosion vulnerability.
- 3. Include an analysis of the results generated for soil erosion and landslide.
- For the VA to landslide, use the MGB geo-hazard map as base map overlaying the adaptive capacity map (from ERDB).
- The report is not complete. There were no discussion on landslide vulnerability, mitigating measures and recommendations.

Mag-Asawang Tubig Watershed

Comments and suggestions:

Vulnerability Assessment

- The process/procedure in vulnerability assessment was missing in the report.
 It was not discussed. A schematic diagram of the process can be included in the report.
- Some parts of the report were lifted from a completed ERDB study report, this should be properly cited.
- It is advised to regenerate the VA map to flooding following the procedure in the FMB TB-16A.
- 4. Analysis and discussion on VA is lacking.

General comments:

(Bansud and Mag-Asawang Tubig Watershed)

- 1. Follow the ERDB VA outline report.
- 2. Follow the standard map layout.
- Use PAGASA projections (2030 and 2050) in generating VA to flooding and compare the generated results with the baseline information.
- Maps (potential impact; adaptive capacity assessment and VA maps) were lacking in the report.



Department of Environment and Natural Resources

LAND MANAGEMENT BUREAU

880 Estuar Building, Quezon Avenue, Brgy. Paligsahan, Quezon City Direct Line: (02) 255-4362 Records and Knowledge Management Division Communication Communi







FOR

The Director and

RECORDS UNIT

Chairman, Watershed Multisectoral Technical Evaluation Committee

(WMTEC)

FROM

The Acting Director

SUBJECT

REQUEST FOR COMMENTS ON THE WATERSHED CHARACTERIZATION CUM VULNERABILITY ASSESSMENT REPORTS SUBMITTED BY DENR

MIMAROPA

DATE

2 7 JAN 2021

This refers to your Memorandum dated 08 January 2021 requesting for comments on the watershed characterization cum vulnerability assessment reports of Bansud and Mag Asawang Tubig watersheds.

For the Bansud WC and VA Report, hereunder are our comments and suggestions:

- a. Please include the number of titled lands (alienable and disposable) in terms of hectares that are within the watershed.
- b. Kindly correct the table number under Section 2.1.5. It should be Table 2.1.25.
- c. Also consider the Ancestral Domains Sustainable Development and Protection Plan (ADSDPP), if available, of the Buhid and Bangon Mangyans in the crafting of the Watershed Management Plan since most of the area within the watershed is covered by CADC 130. As mentioned in the draft report, the support from the IPs is crucial for the success of the programs in the watershed.

With regard to the VA of the Mag Asawang Tubig watershed, please be informed that we have no further inputs on the report.

For your information and consideration.

ATTY. EMELYNE V. TANABIS, CESE

Department of Environment and Natural Recommendate Land Natural Recommendate Flat Commendate Comme

DTS# 20210100456 PDS/01/21/2021 LFB/tvg-0



Republic of the Philippines

Department of Environment and Natural Resources Visayas Avenue, Diliman, 1100 Quezon City Tel. Nos. (632) 929-6626 to 69, (632) 929-6252 929-6620; 929-6633 to 35; 929-7041 to 43

Website: www.denr.gov.ph

MEMORANDUM

FOR

THE DIRECTOR

Forest Management Bureau

FROM

THE OIC, DIRECTOR

Policy and Planning Service

SUBJECT

COMMENTS ON THE WATERSHED CHARACTERIZATION

CUM VULNERABILITY ASSESSMENT REPORTS OF

MIMAROPA AND REGION VIII

DATE

18 JAN 2021

This has reference to the draft Watershed Characterization cum Vulnerability Assessment Reports of Bansud, Mag-asawang Tubig, Bito, and Binahaan River Watersheds in Regions MIMAROPA and VIII submitted to this Office for review and evaluation.

Based on our evaluation, the said reports have generally complied with the requirements of the *FMB Technical Bulletin 16-A* in terms of the technical process requirements conducted. While this Office finds sufficient technical discussion and detailed explanation of the result, hereunder are our specific comments and suggestions:

MIMAROPA

1. Bansud River Watershed

On Chapter II, the facts presented should be spatially presented and identified for easier analysis in Chapter III (Vulnerability Assessment). Please provide more discussion on the sensitivity, exposure and adaptive capacity of the communities and ecosystem as required in the FMB Technical Bulletin 16-A.

2. Mag-Asawang Tubig River Watershed

Please include more discussion and map outputs on the possible exposure of the communities and ecosystems with respect to identified hazards in the Magasawang Tubig Watershed.

Region VIII

3. Bito River Watershed

The baselining was comprehensively conducted and followed the guidelines of FMB. Please include additional discussion and expound the result for "low overall weighted mean" in the adaptive capacity parameters. This is a valuable

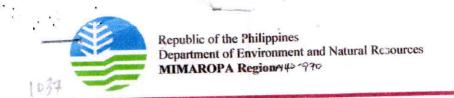
input for prioritizing and designing activities for the Integrated Watershed Management Plan (IWMP).

4. Binaha-an River Watershed

The Watershed Characterization was used and input to the vulnerability assessment and the exposure for the hazard was spatially identified in the maps. While the discussion was comprehensive and logical, some of the maps lack specific legends.

For consideration please.

Muyufi MELINDA C. CAPISTRANO



DEC 1 3 2019

DEPT. OF ENVIRORMENT AND NATURAL RESOURCES

MEMORANDUM FOR THE SECRETARY

THRU

The Assistant Secretary for Field Operations - Luzon ASSISTANT ON SIGNATURE OF THE PROPERTY OF

ATTENTION:

The Director, Forest Management Bureau

FROM

The Regional Executive Director

SUBJECT

SUBMISSION OF WATERSHED CHARACTERIZATION,

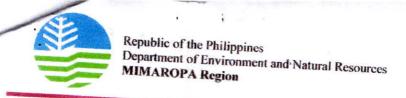
VULNERABILITY ASSESSMENT & INTEGRATED

WATERSHED MANAGEMENT PLAN

The DENR MIMAROPA Region thru its Field Offices had adopted DENR Memorandum Circular 2008-05 and FMB Technical Bulletin No. 16 & 16-A, for the preparation of the Watershed Characterization, Vulnerability Assessment, and Integrated Watershed Management Plan.

The status of the target watershed management activities are as follows:

Field Office	Watershed Management Activity	Accomplishment (1st to 3rd quarter)	Accomplishment (4 th Quarter)
	Mag-asawang Tubig Watershed (Vulnerability Assessment)	 Data Collection from Municipalities of Naujan and Victoria, Philippine Statistics Authority (PSA) and PAG-ASA (15%); Interpollation and Collation (15%); and Generation of twenty (20) maps was completed 	Final Report (Hardcopy) received at the Regional Office October 28, 2019
CENRO Socorro (under PENRO Oriental Mindoro)	Bansud River Watershed (Watershed Characterization & Vulnerability Assessment)	 Acquisition of secondary data (Municipal Development Plan, Land-Use Plan and Environmental profile); Conducted Leveling-off workshop meeting on July 2, 2019; First Draft for Chapters 1 and 2 was already submitted by the Consultant An orientation with regards to the preparation of WC and VA for the community was conducted on July 17, 2019 at Session Hall, Municipality of Bansud, Oriental Mindoro 	Final Report (Hardcopy) received at the Regional Office on November 4, 2019



			Control of the Contro
	Catuiran-Bucay: River Watershe (Integrated Watersh Management Plan	d /Workshop in the	Final Report (Hardcopy) received at the Regional Office on November 4, 2019
CENRO San Jose (under PENRO Occidental Mindoro)	Caguray River Watershed (Watershed Characterization & Vulnerability Assessment)	Gathering of Secondary Data for the Characterization and Vulnerability Assessment was already conducted; Generated different thematic maps i.e. Political map, Climatic map, Geologic map, Topographic map, Vegetative Land Cover map, Location map, Slope map, Land Management map, Land Classification map, and Soil Erosion map; Procurement of Technical Consultant for the preparation and interpretation of the data was already posted in PhilGEPS and the contract was already awarded.	
CENRO Quezon under PENRO Palawan)	Malatgao River Watershed (Watershed Characterization & Vulnerability Assessment)	May 6, 2019 - Prepared a letter to Hon. Lucena D. Demaala, Municipal Mayor of Narra regarding the preparation of Watershed Characterization and Vulnerability Assessment of Malatgao River Watershed and invited Key Officials of the Municipality on a Round Table Discussion which was conducted on May 28, 2019; May 8, 2019 - CENRO Leonard Caluya signed Special Order No. 15, series	

- of 2019 entitled: "Creation of Watershed Management Vulnerability Assessment Team (WMVAT)";
- May 22, 2019 CENRO Caluya signed a memorandum appointing a Focal Person for the Watershed Characterization and Vulnerability Assessment of Malatgao River Watershed;
- Initial report on the preparation of Watershed Characterization Vulnerability Assessment with attached digitized map, plan of activities, CENRO Special Order and Letter Request to MLGU Narra, Palawan was submitted to the RED thru PENRO Palawan May 24, 2019;
- May 31,2019 a report was submitted to CENRO Caluya on the conducted Round Table Discussion on May 28, 2019 and was endorsed to PENRO Palawan dated June 17, 2019;
- A 2nd quarter progress report on Watershed Management with Vulnerability Assessment was submitted and endorsed on June 17, 2019;
- July 9, 2019 CENRO
 Quezon requested assistance
 from RED regarding the
 conduct of Watershed
 Characterization and
 Vulnerability Assessment as
 cited in FMB Technical
 Bulletin No. 16;
- Secondary data gathering and small group discussion with some of the barangays within Malatgao River Watershed was conducted on the first week of July and report was submitted on July 9, 2019;
- Request for a copy of the Characterization of Malatgao River prepared by

Final Report (Hardcopy) received at the Regional Office on October 18, 2019



Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region

	ERDB was sent to RED on July 15, 2019; Progress report on Malatgao Watershed Characterization and Vulnerability Assessment as of July 2019 was submitted on July 24, 2019; July 25, 2019 – Request for technical assistance in the conduct of Water Quality was sent to OIC-PEMU Edna Velasco and a letter requesting for the assistance on the analysis of water quality was sent to Executive Director Nelson P. Devanadera of PCSD. August 7-16, 2019 – Primary data gathering was conducted which include Flora and Fauna Assessment within the Malatgao Watershed and measuring of stream flow of the upper, middle and lower part of the watershed.	
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Attached are the hardcopy of the Characterization, Vulnerability Assessment, & Integrated Watershed Management Plan.

For the Secretary's information and record.

HENRY A. ADORNADO, Ph.D.

