



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

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MEMORANDUM

FOR : The Regional Executive Director
DENR MIMAROPA Region
Roxas Boulevard, Ermita, Manila

FROM : The Assistant Secretary for Policy, Planning, and Foreign-Assisted and
Special Projects, and Director, in concurrent capacity

SUBJECT : **MEMO DATED JANUARY 13, 2022, RE: ANNUAL
ACCOMPLISHMENTS ON WATERSHED MANAGEMENT AND
WATERSHED INSTRUMENTATION WITHIN DENR MIMAROPA
REGION FOR CY 2021**

DATE : **MAR 08 2022**



This pertains to your Memorandum dated 13 January 2022. submitting to this Office your CY 2021 Annual Accomplishment Report on the preparation of Watershed Characterization Report cum Vulnerability Assessment (CRVA) and Integrated Watershed Management Plan (IWMP), and monitoring and maintenance of the established Science-Based Real Time Watershed Monitoring Instruments.

Review on the submitted documents disclosed the following observations and recommendations, to wit:

1. The Characterization Reports and Vulnerability Assessment (CRVA) of Pagbahan, Cavillan and Aborlan Watersheds and Integrated Watershed Management Plan (IWMP) of Bongabong Watershed are still being revised based on the comments made by the Regional IWMP Review Committee (RIRC) and Watershed Multisectoral Technical Evaluation Committee (WMTEC).
2. The two (2) Automated Weather Stations (AWS) in Alcate, and Macatoc, Victoria, and one (1) Automated Water Level Station (AWLS) in Abaton Bridge, Calapan City are all functioning well and have installed signages. Nonetheless, it appears that the AWS in Bongabong has damaged soil moisture sensor wire while the Groundwater Monitoring Station in Alcate, Victoria was damaged by ant infestation and water leakage in the batteries.
3. While we appreciate the submitted water quality assessment report of Pula River Watershed, may we also suggest that quarterly and annual reports for the installed watershed instruments in Mag-asawang Tubig, Bongabong, and Butas River Watersheds be also included in your future reports, following the attached format for your ready reference. Further, should you need further assistance and clarification in using the reporting format, kindly contact us at (02) 29282891 or e-mail us at frcd.wems@gmail.com.
4. Foregoing considered, we would appreciate receiving updates on the repair and maintenance of the damaged soil moisture sensor wire of the AWS in Bongabong and Groundwater Monitoring station in Victoria.

Please be informed that your report will be kept in this Office for review, consolidation and monitoring of the said watersheds in your Region.

FOR YOUR INFORMATION AND GUIDANCE, PLEASE.

for: eduardo
MARCIAL C. AMARO, JR., CESO II

Cc: The Undersecretary for Field Operations and Environment

FORMAT OF THE QUARTERLY/ANNUAL REPORT ON DATA GENERATED FROM THE SCIENCE-BASED REAL-TIME WATERSHED MONITORING INSTRUMENTS

Quarterly/annual reports being submitted by the Regional Offices shall not only include DENR-installed watershed instruments but also instruments installed by other agencies. Each section of the report shall reflect information such as, but not limited to the following:

1. INTRODUCTION

- brief description of the whole watershed being monitored
 - location
 - area
 - importance of the watershed (source of water for domestic, irrigation, commercial, industrial and ecosystem purposes; others)
- monitoring instruments installed within the watershed with map of the watershed showing location where instruments were installed and table shown below

Instrument	Purpose	Location (Coordinates, Bgy, Town/City	Date Installed	Status

2. DATA ANALYSIS

- Summary of the date collected for the period using the table below

Parameter	Number of Instruments Installed	Period Covered	Average	Maximum	Minimum
Rainfall					
Air Temperature					
Relative Humidity					
Wind Velocity					
Wind Direction					
Solar Radiation					
Streamflow Level (m)					
Streamflow (cms)					
Streamflow Temp (C)					
Groundwater Level (m)					
Soil Moisture					
Conductivity					

NOTE: Average values are computed arithmetic average for all instruments installed in the watershed (e.g., average of rainfall from all AWS installed in the watershed). Maximum and minimum values are the maximum and minimum values observed in the watershed from all instruments.

- Trend analysis for each parameter using line or bar graphs covering data collected from the beginning to the period being reported
- Include also the comparison of data recorded from similar instruments installed in other areas by other agencies, if possible.

- Correlation of various parameters with one another as appropriate using 2-dimensional graphs:
 - Rainfall and air temperature
 - Rainfall and stream water level
 - Rainfall and CTD water level
 - Air temperature and water temperature
 - Streamflow during low/mid flow season and stream water level
- Brief explanation of the trend of a parameter observed by exploring attribution to other parameters monitored, and attribution to natural and human activities observed/recorded during the period.

If appropriate, include the following:

- Include secondary data such as historical data and projections from existing masterplans and correlate these in the present data to improve the analysis.
- Include a list of key events in the watershed during the period of report such as but not limited to natural and human-induced disasters (forest/grass/brushfires, landslides, flashfloods, typhoons, excessive rainfall event, storm surge, earthquake, volcanic eruption) with estimated cost of damages and persons affected, programs, activities, projects, policies (e.g., tree planting, road construction, apprehensions of illegal forest activities, launching of forest and environmental related activities/programs (e.g., solid waste and wastewater management, IEC and advocacy, etc.).

Event – Natural and Human- induced Disaster	Description	Date	Location (long/lat, barangay, town/city, province)	Number of individuals affected	Estimated Cost of Damages

Event – Program, Activity, Project	Description	Date	Location (long/lat, barangay, town/city, province)	Organizer (Individuals), Group, Organization, NGA, NGO	Status

3. SUMMARY AND CONCLUSION

- Summary of the report
- Major findings on the analysis

4. RECOMMENDATIONS

Include in this section recommendations on how to utilize the results of the analysis data gathered during the period in making science-based decisions related to the DENR programs and activities being implemented by your Region.

- Use of threshold values of rainfall (available in PAGASA website) that may result to flooding downstream
- Use of the data as referenced from Philippine Standards for Drinking Water for providing advisories on safe use of water from the groundwater
- Use in determining the rate of groundwater extraction that will not exceed the rate of recharge
- Use of weather data to guide farmers in adapting their farming practices
- Use of streamflow quality and quantity data to guide the management of land uses and land use practices in the watershed to ensure that streamflow quality and quantity are not adversely affected (e.g., to determine how much forests should be maintained in the watershed, and how much uplands can be used for upland farming or agroforestry)
- Use in the identification of areas in the watershed that need priority actions such as but not limited to highly eroded and landslide areas, flood prone areas, and deforested areas, critical areas vulnerable to farming and other intensive uses
- Use in identification of areas that are safe and suitable for ecotourism

5. ANNEXES

- profile of the whole watershed (developed following the DENR Technical Bulletin)
- tabulated summary of data downloaded from the instruments including manually downloaded data (sample tables attached).
- visualization/graph of each recorded data including overlaying graphs
- include permanent sections that shall be updated in the succeeding reports, whenever necessary, namely:
 - a. List of all watersheds showing all geographic information (coordinates, sitio, barangay, municipality, province at least)
 - b. List of instruments per watershed with all essential geographic information (coordinates, elevation, sitio, barangay, municipality, province at least), and status of each instrument with dates as appropriate.
 - c. Map showing the various watersheds and location of all monitoring instruments and the extent of the area covered by each instrument.
 - d. List and description of all instruments and their respective purposes (i.e, data being collected, and potential applications of the data being collected).
 - e. List of focal persons including members of monitoring team per watershed
- Include a log of data requests during the period being reported from DENR offices, LGUs, academe, NGOs, etc. Include the name of requesting agency/office/person, date of request, data requested, use of data being requested, and name of the watershed.

NOTE: Ideally, making application and implication statements at this early stage about the data being gathered and reported for the period should be avoided in order not to appear that there is already conclusive evidence being used as the basis of applications. However, potential applications and implications may be stated but with clear caution that the datasets so far gathered are still far from being adequate to support evidence-based conclusions and recommendations.

SAMPLE TABLES

Table 1. Summary of Climatological Data Obtained from the Installed Automated Weather Stations for January 2021.

				Total Precipitation (mm)	Average Temp. (°C)	Max Temp. (°C)	Min Temperature (°C)	Average Solar Radiation (W/m²)	Average Wind Speed (m/s)	Average Vapor Pressure (kPa)	Average Atmospheric Pressure (kPa)	Average Vapor Pressure Deficit (kPa)
	Watershed	Province	Municipality									
Region 1	Bulu River Watershed	Ilocos Norte	Adams	FOR BATTERY REPLACEMENT/CHARGING								
Region 1	Buaya River Watershed	Ilocos Norte	Gregorio del Pilar	133	24.42	33.5	15.8	362.33	1.17	2.37	97.4	0.84
Region 1	Bulu River Watershed	Ilocos Norte	Dumalneg	221	23.77	30.5	18.4	316.55	2.28	2.25	100.36	0.71
Region 2	Cagayan River Watershed	Cagayan Valley	Baggao	189	23.1	32.4	16.8	259.28	-	2.33	100.94	0.52
Region 2	Cagayan River Watershed	Cagayan Valley	Baggao	192.6	22.96	31.7	16.2	218.39	0.62	2.4	100.68	0.42
Region 2	Cagayan River Watershed	Cagayan Valley	Alcala	148.6	23.02	31.9	18.4	222.8	1.79	2.44	100.84	0.39
Region 3	Agno River Watershed	Tarlac	Capas	70.8	25.25	31.8	20.2	269.52	0.49	2.82	99.112	-
Region 3	Agno River Watershed	Tarlac	San Jose	72.4	25.52	33.5	18.5	359.43	0.72	2.56	99.53	0.76
Region 3	Agno River Watershed	Tarlac	Tarlac City	41.4	25.58	31.9	19.1	374.09	1.7	2.88	100.31	-
Region 4A	Pasig-Laguna River Watershed	Rizal	Rodriguez	INSTRUMENTS WASHED OUT DUE TO TYPHOON ULYSSES								
Region 4A	Pasig-Laguna River Watershed	Rizal	Antipolo	INSTRUMENT UNDER REPAIR								
Region 4A	Pasig-Laguna River Watershed	Laguna	Liliw	209.4	23.99	31.7	18.5	219.55	0.66	2.49	98.72	0.51
Region 4B	Mag-asawang Tubig	Oriental Mindoro	Victoria	1155.2	23.88	32.4	20.5	148.82	-	2.99	99.97	0.22
Region 4B	Butas River Watershed	Oriental Mindoro	Victoria	525.4	25.05	32	21.2	203.51	0.62	2.99	100.86	0.21
Region 4B	Bongabong River Watershed	Oriental Mindoro	Calapan City	186	24.87	33.8	20.7	294.72	2.61	2.61	98.2	0.57
Region 5	Bicol River Watershed	Albay	Bacacay	388.2	24.44	30.1	21.2	222.98	1.59	2.49	99.1	0.58
Region 5	Bicol River Watershed	Camarines Sur	Iriga city	314.6	25.71	32.8	21.2	255.74	1.1	2.86	100.79	0.46
Region 5	Bicol River Watershed	Albay	Polangui	FOR BATTERY REPLACEMENT/CHARGING								
Region 6	Panay River Watershed	Capiz	Roxas City	38	26.36	31	22.4	286.29	1.66	2.78	100.79	0.67
Region 6	Hamulauon River Watershed	Capiz	Tapaz	462	25.01	33.3	21.5	195.97	0.26	2.67	99.24	0.52
Region 6	Hamulauon River Watershed	Capiz	Dao	241.6	25.64	32.3	21.9	200.56	1.45	2.79	100.82	0.52
Region 7	Abatan River Watershed	Bohol	Catigbian	551.4	24.9	31.2	18.9	237.85	0.63	2.74	98.48	0.43
Region 7	Loboc River Watershed	Bohol	Carmen	348.6	24.94	32.8	19.2	247.37	0.55	2.73	98.34	0.45
Region 7	Loboc River Watershed	Bohol	Loboc	238.4	26.22	32.5	22	282.99	1.39	2.84	100.76	0.59
Region 8	San Joaquin River Watershed	Leyte	Ormoc City	50.4	22.85	29	18.2	240.31	1.31	2.29	94.02	0.5
Region 8	San Joaquin River Watershed	Leyte	Dagami	698.8	24.93	32.4	20.9	228.87	0.41	2.7	98.57	0.47
Region 8	San Joaquin River Watershed	Leyte	Tanauan	670.6	25.74	31.8	22.2	293.41	1.24	2.81	100.77	0.52
Region 9	Salug Daku River Watershed	Zamboanga del Sur	Dumingag	227	26.12	33.9	21.8	390.47	0.39	2.97	99.96	0.46
Region 9	Magpangi River Watershed	Zamboanga del Sur	Josefina	FOR BATTERY REPLACEMENT/CHARGING								
Region 9	Salug Daku River Watershed	Zamboanga del Norte	Sergio Osmena	5.2	23.22	31.5	18.4	163.12	0.62	2.61	94.76	0.26
Region 11	Tagum River Watershed	Davao del Norte	Talaingod	298.4	24.78	34.4	21.2	291.41	0.38	2.7	96.38	0.46
Region 11	Davao River Watershed	Davao del Sur	Davao City	FOR BATTERY REPLACEMENT/CHARGING								

Region 11	Davao River Watershed	Davao del Sur	Davao City	431.6	23.44	31.4	19.1	276.56	0.37	2.5	94.62	0.42
Region 12	Tamontaca River Watershed	South Cotabato	T'Boli	321.6	20.51	27.6	16.3	24.08	0.62	2.43	89.56	0.24
Region 12	Tamontaca River Watershed	South Cotabato	Lake Sebu	291.8	22.82	29.9	19.1	278.27	0.43	2.37	92.96	0.43
Region 12	Tamontaca River Watershed	South Cotabato	Sto Niño	183.6	5.86	33.1	21.6	309.08	0.65	2.7	99.05	0.67
Region 13	Agusan-Agusan del Norte River Watershed	Agusan del Sur	Bayugan									
Region 13	Cabadbaran River Watershed	Agusan del Norte	Cabadbaran City	372.2	25.12	32.5	21.3	262.28	0.45	0.81	99.84	0.41
Region 13	Magallanes River Watershed	Agusan del Norte	Butuan City	349.8	25.38	34	21.3	215.91	0.37	2.91	100.5	0.36
NCR	Navotas River Watershed	Quezon City		SIGNAL INTERCEPTION; INSTRUMENT FOR RELOCATION								
NCR	Pending	Quezon City		SIGNAL INTERCEPTION; INSTRUMENT FOR RELOCATION								
NCR	Navotas River Watershed	Quezon City		SIGNAL INTERCEPTION; INSTRUMENT FOR RELOCATION								
Region 10	Agusan-Misamis Oriental River Watershed	Bukidnon	Manolo Fortich	517.8	20.35	29.2	15.8	231.45	0.43	2.11	88.61	0.3
Region 10	Agusan-Misamis Oriental River Watershed	Bukidnon	Libona	FOR REPLACEMENT OF INSTRUMENT DATA LOGGER								
Region 10	Agusan-Misamis Oriental River Watershed	Misamis Oriental	Cagayan de Oro City	65.4	26.8	33.6	22.5	325.14	1.03	2.95	100.54	0.6
CAR	Cagayan River Watershed	Kalinga	Pinukpok	FOR BATTERY REPLACEMENT/CHARGING								
CAR	Cagayan River Watershed	Mountain Province	Bauko	71.4	13.03	19.5	6.8	274.22	-	1.42	-	0.1
CAR	Cagayan River Watershed	Kalinga	Tinglayan	FOR BATTERY REPLACEMENT/CHARGING								

Table 2. Summary of Groundwater Data Obtained from the CTD Groundwater Sensors for January 2021.

	Watershed	Province	Municipality	Sitio/Barangay	Average Depth (mm)	Average Temperature (°C)	Average Conductivity (mS/cm)
Region 2	Cagayan River Watershed	Cagayan Valley	Baggao	Masical	7534.8177	27.7403	0.3065
Region 3	Agno River Watershed	Tarlac	San Jose	CBFM Areas of Help Farmers Association	3629.5500	27.0000	0.1090
Region 4A	Pasig-Laguna River Watershed	Rizal	Rodriguez	Sitio Wawa, Brgy. San Rafael	721.7016	26.6240	0.6213
Region 4B	Mag-asawang Tubig	Oriental Mindoro	Victoria	MinsCAT	8947.7081	26.5186	0.2463
Region 5	Bicol River Watershed	Camarines Sur	Bula	Catasan Elementary School, Brgy. San Miguel	9877.7959	28.5000	0.4808
Region 6	Malaguit River Watershed	Capiz	Pontevedra	Malag-It	4754.4916	28.7000	0.3945

Region 11	Davao River Watershed	Davao del Sur	Davao City	UM Campus, Matina	2253.2727	31.0476	1.2907
Region 12	Tamontaca River Watershed	South Cotabato	Sto. Niño	Poblacion	8338.1058	28.3000	0.1702

Table 3. Summary of Water Level Obtained from the Automated Water Level Station (AWLS).

Region	Watershed	Province	Municipality	Sitio/Barangay	Distance from the Sensor to River Bed (m)	MAX	MIN
CAR	Cagayan River Watershed	Kalinga	Tabuk	Canao Bridge		1.68	0.7
NCR	Navotas River Watershed			Atherton Bridge	7.2	38.14	0.46
Region 1	Bulu River Watershed	Ilocos Norte	Between Bangui and Pagudpud	Caramuagen/ Bolo Bridge	14.6	7.78	0.37
Region 2	Cagayan River Watershed	Cagayan Valley	Baggao	Ragarag Bridge	14.6	28.97	3.26
Region 3	Agno River Watershed	Tarlac	Capas	Brgy. Lawis	14.6	3.96	0.64
Region 4A	Pasig-Laguna River Watershed	Laguna	Sta. Cruz	Pagsawitan Bridge	14	5.85	1.66
Region 4B	Mag-asawang Tubig	Oriental Mindoro	Calapan City	Abaton-Maidlang Bridge	14.6	9.61	7.05
Region 5	Bicol River Watershed	Camarines Sur	Bula	Panuypuyan Bridge	11.3	-	-
Region 6	Hamulauon River Watershed	Capiz	Dao	Duyoc	12.95	8.35	2.88
Region 7	Loboc River Watershed	Bohol	Carmen	Katipunan Bridge	10.739	7.84	0.31
Region 8	Sangputan River Watershed	Leyte	Jaro	Cabayungan Bridge, Brgy. 1 Poblacion	7	2.15	0.58
Region 9	Salug Daku River Watershed	Zamboanga del Sur	Molave	Molave-Mahayag	10	6.22	1.54
Region 10	Cugman River Watershed	Misamis Oriental	Cagayan de Oro City	Cugman	7.5	3.39	0.5
Region 11	Padada River Watershed	Davao del Sur	Matanao	Padada Bridge, Brgy. Tamlangon	-	6.51	2.94
Region 12	Tamontaca River Watershed	South Cotabato	Marbel	Namnama Bridge	7	1.34	0.01
Region 13	Guihao-an River Watershed	Agusan del Norte	Buenavista	Brgy. Rizal, Agusan	9	2.34	0.27

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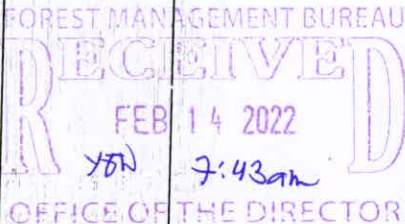
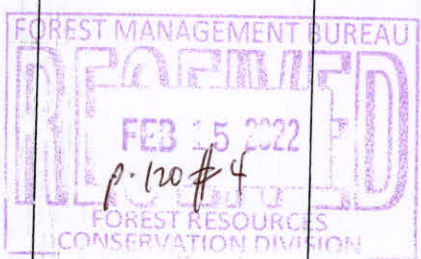
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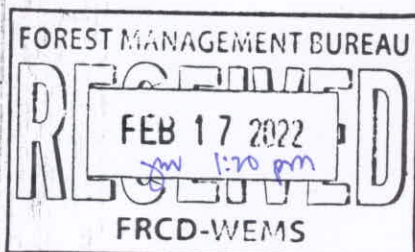
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and Watershed Instrumentation within DENR MIMAROPA Region for CY 2021
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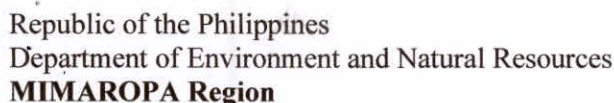
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cc Addressee FMB D

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JAN 13 2022

MEMORANDUM

FOR : Assistant Secretary for Policy, Planning, and Foreign-Assisted and Special Projects, and FMB Director, in concurrent capacity

FROM : The Regional Executive Director

SUBJECT : **ANNUAL ACCOMPLISHMENTS ON WATERSHED MANAGEMENT AND WATERSHED INSTRUMENTATION WITHIN DENR MIMAROPA REGION FOR CY 2021**

This pertains to our target on 003: ***Adaptive Capacities of Human Communities and Natural Systems Improved***, A. Environment and Natural Resources Resiliency Program, A.1. Natural Resources Assessment, 1. Watershed Management and ***Soil Conservation and Watershed Management Including River Basin and Management and Development***, 1. Watershed Management and RBDM under the approved Work and Financial Plan (WFP) CY 2021 (see Annex A). Relative thereto, hereunder are the summary of status and updates of the said activities:

Table 1. Summary report of accomplishments for the **Watershed Characterization Report and Vulnerability Assessment (CRVA) and Integrated Watershed Management Plan (IWMP)** within the DENR MIMAROPA Region, as of 4th quarter of CY 2021.

Field Office	Watershed Management Activity	Annual Accomplishments (as of 4 th Quarter)
CENRO Sablayan, Occidental Mindoro	Pagbahan Watershed CRVA	All of the plans are undergoing revision and finalization per comments of the Regional Integrated Watershed Management Plan (IWMP) Review Committee (RIRC) (Regional Special Order (RSO) No. 2021-468) and Watershed Multisectoral Technical Evaluation Committee (WMTEC) (DENR SO 2009-140) last December 27 and 29, 2021 via Zoom. Draft copies of CRVAs and IWMP were copy furnished to your Office dated 20 December 2021. (<i>Annex B</i>).
CENRO Roxas, Oriental Mindoro	Cavillan Watershed CRVA	
CENRO Puerto Princesa City, Palawan	Aborlan Watershed CRVA	
PENRO Oriental Mindoro	Bongabong Watershed IWMP	

On the other hand, monitoring of installed watershed instruments in Oriental Mindoro was conducted regularly by the Provincial Environment and Natural Resources (PENRO) Oriental Mindoro every quarter (February 18-19, May 5-7, August 11-13, November 23-26) for the whole year (*Annex C.1-C.4*). Further, the Regional Office also conducted a separate monitoring of the instruments on December 8-10, 2021 (*Annex C.5*).

There are five (5) installed watershed instruments in the region, specifically in Oriental Mindoro, which include one (1) Automatic Water Level Station (Calapan City), three (3) Automated Weather Stations (Bongabong, DA-RIARC, Victoria and Brgy. Macatoc, Victoria) and (1) Automatic Groundwater Monitoring Station (MinSU, Alcate, Victoria). All the instruments are functioning and in good condition, except for the Groundwater Monitoring Station (*see Table 2*).

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Table 2. Summary of status and condition of the **Watershed Instruments** in Oriental Mindoro, as of 4th quarter of CY 2021.

Watershed Instrument	Location	Date of Installation	Status/Condition
1. Abaton - Automatic Water Level Station (AWLS)	Abaton Bridge, Brgy. Parang, Calapan City, Mag-Asawang Tubig Watershed (MATW)	2019 July 28	The AWLS is well functioning and has installed signages.
2. MINSCAT-Groundwater Monitoring Station (GWMS)	MinSU Main Campus (former MINSCAT), Brgy. Alcate, Victoria, MATW	2019 July 31	The data logger (z6-04985) should be replaced since it was damaged due to ant infestation and water leakage in the batteries.
3. DA Victoria-Automatic Weather Station (AWS)	Department of Agriculture -Regional Integrated Agricultural Research Center (DA-RIARC), Brgy. Alcate, Victoria, MATW	2019 May 22	The AWS is well functioning and has installed signages.
4. Macatoc- AWS	Macatoc Elementary School, Brgy. Macatoc, Victoria, MATW	2019 May 22	The AWS is well functioning and has installed signages.
5. Bongabong-AWS	Brgy. Hagan, Bongabong, Bongabong Watershed	2019 May 22	The AWS is functional except for its soil moisture sensor since its wire is damaged and should be repaired/replaced.

Below is a summary of the accomplishments on the other targets of the region under Watershed Instrumentation:

Table 3. Summary report of accomplishments for the targets under **Watershed Instrumentation** of the Region.

Program/Activity/Project	Annual Accomplishment
1. Database access subscription (Zentra Cloud for AWS & CTD Groundwater sensor)	The request for the procurement of subscription for Zentra Cloud for Automated Weather Station (AWS) & Conductivity Temperature and Depth (CTD) Groundwater Sensor is ongoing, which is funded under the 2021 GAA continuing fund (Annex D) .
2. Maintenance and Protection of the Monitoring System	
a. Professional Services (Laboratory Analysis, services, etc.)	Soil (6 sites) and water (8 sites) sampling was conducted in the municipalities of Socorro, Pinamalayan, and Pola within the Pula River Watershed of Oriental Mindoro last June 3-4, 2021. The results of the soil and water sampling analysis are also appended (<i>Annex E</i>).
b. Orientation on LGUs on the data management generated on watershed instrumentation	The orientation was conducted with selected Local Government Units (LGUs) of Oriental Mindoro on October 1 & 4 (Calapan City) and October 5, 2021 (Victoria) (<i>Annex F</i>).
3. Hiring of Database Manager for Instrumentation	Hired a Database Management Information Systems Analyst (DMISA) II based in the Regional Office for the

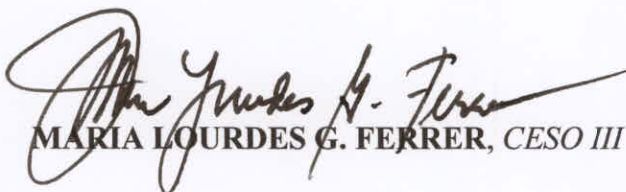


Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region

period of January-December 2021 (*Annex G*).

Please see attached reports for your reference.

For your information and record.


MARIA LOURDES G. FERRER, CESO III



Department of Environment
and Natural Resources
MIMAROPA Region



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