

APPENDIX A

Environmental Code

PRESIDENTIAL DECREE
No. 1152

Subject: PHILIPPINE ENVIRONMENT CODE

WHEREAS, the broad spectrum of environment has become a matter of vital concern to the government;

WHEREAS, the national leadership has taken a step towards this direction by creating the National Environment Protection Council under Presidential Decree No. 1121;

WHEREAS, it is necessary that the creation of the Council be complemented with the launching of comprehensive program of environmental protection and management.

WHEREAS, such a program can assume tangible and meaningful significance only by establishing specific environment management policies and prescribing environment quality standards in a Philippine Environment Code.

NOW, THEREFORE, I, FERDINAND E. MARCOS, President of the Republic of the Philippines, by virtue of the powers vested in me by the Constitution, do hereby order and decree:

Section 1. Short Title. - This Decree shall be known and cited as the "Philippine Environment Code."

APPENDIX B

Launching



APPENDIX C

Assessment of Physicochemical Parameters



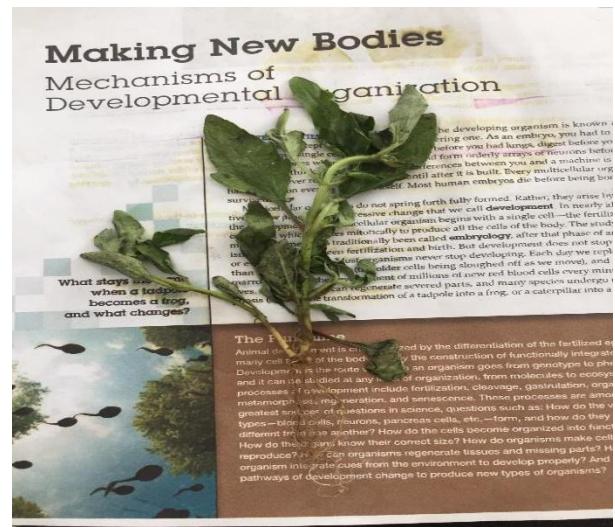
APPENDIX D

Plant Collection



APPENDIX E

Plant preservation



APPENDIX F

Plant authentication



 **UP BIOLOGY** 
INSTITUTE OF BIOLOGY
COLLEGE OF SCIENCE
UNIVERSITY OF THE PHILIPPINES-DILIGAN

Telephone: (075) 8641-8888 loc. 2027 Diligan, Quezon City 1506 Email: biology@up.edu.ph
Facsimile: (075) 8641-8875 Website: www.biology.up.edu.ph

CERTIFICATE OF IDENTIFICATION

This is to certify that the accepted scientific name/s of the specimen/s brought by **Marilyn S. Arcilla** and group from **Mahulacat City College** is/are:

Family Name	Scientific Name
Asteraceae	<i>Mikania cordata</i> (Burm.f.) B.L.Rob.
Fabaceae	<i>Calligonum macrostachya</i> Desm.
Malvaceae	<i>Cochlospermum tinctorius</i> L.
Fabaceae	<i>Mimosa pudica</i> L.
Asteraceae	<i>Zizipha prostrata</i> (L.) L.
Poaceae	<i>Andropogon</i> sp.
Asteraceae	<i>Eleusine</i> sp.
Cyperaceae	<i>Cyperus rotundus</i> L.
Euphorbiaceae	<i>Acacia catenata</i> L.
Asteraceae	<i>Syntherisma andyburnii</i> [L.] Gaertn.

The specimen/s was/were identified using materials at the Institute of Biology, Jose Vera Santos Memorial Herbarium (PNUH), College of Science, University of the Philippines, Diligan, Quezon City.

This certificate is issued as requested by the researcher/s and may be used for whatever legal matter pertaining and related to this identification.

Edwilio S. Ferralinda, Ph. D.
Curator
Jose Vera Santos Memorial Herbarium (PNUH)

Date: August 29, 2023

APPENDIX G
Clean-up drive



APPENDIX H

Weighing the Solid Waste



APPENDIX I

Meeting with LGU Heads and Manila Bay Task Force



APPENDIX J

Meeting with City Environment Natural Resources Office



APPENDIX K

Ocular Visit



APPENDIX L

Quotation



CRL Environmental Corporation

Building 02, Berthaphil Compound 1
 Berthaphil Industrial Park, Clark Freeport Zone
 Pampanga 2009, Philippines
 Tel: (+632) 8840-4071 (+632) 8840-2874
 www.crlabs.com

Quotation

Quote Number: QT00008505
Quote Date: 06/26/2023
Page: 1 of 1

Quoted to:

Mabalacat City College
 Rizal St. Dolores
 Mabalacat City
 Pampanga

Ship to:

Mabalacat City College
 Rizal St. Dolores
 Mabalacat City
 Pampanga

Attention: Glen S. Nolasco

Tel. No.: 09496878573

Customer ID	Good Thru	Payment Terms	Sales Rep
mcc		C.O.D.	Maricar Erica F. Openiano

Project Name	Delivery Term
	TAT: (7)-(10) Working Days

DESCRIPTION	QTY	UOM	U. PRICE	AMOUNT
*Drinking Water Analysis: River water Source				
TOTAL COLIFORM - 3 DILUTIONS	3	TEST	900.00	2,700.00
HETEROTROPHIC PLATE COUNT	3	TEST	400.00	1,200.00
THERMOTOLERANT COLIFORM/E.COLI	3	TEST	1,300.00	3,900.00
Sales Discount	1	TEST	-1,560.00	-1,560.00

Pick up result

TERMS AND CONDITIONS:

- a) Minimum transaction amount of PHP 1,500
- b) For transactions PHP 2,500 and below, CASH payment required.
- c) Cost for additional and/or re-printing of reports is PHP 150.00 per Report.

Total 6,240.00

Prepared by: Maricar Erica F.

Conforme: _____
 Signature over Printed Name



CRL Environmental Corporation

05 July 2023

Glen S. Nolasco

MCC - Rizal St., Dolores, Mabalacat City, Pampanga

Contact No.: 09771426735

ATTN: **Mr. Glen S. Nolasco**

Project Name: ISIP RIVER RESTORATION

Lab. Nos.: P00140691-01/03

Enclosed are the results for samples received by CRL Environmental Corporation and tested for the parameters in the enclosed chain of custody.

Our DENR Recognition Certificate with C. R. No. 023/2021, will expire on August 25, 2024.

Likewise, our DOH Accreditation with Accreditation No. 03-001-2325-LW-2, is valid from January 01, 2023 until December 31, 2025.

Please note that any unused portion of the sample/s will be discarded 15 days after the date of this report, unless you have requested otherwise.

Thank you for the opportunity to service the needs of your company. Please feel free to call us at (045) 599-3943 or (02) 552-5100 if we can be of further service to you.

Very truly yours,


MARIA CARMELA Q. CAPULE, Ph.D.
Chief Operating Officer

APPENDIX M


Official Receipts of Test

CRM-SC-001

Page ___ of ___

CHAIN OF CUSTODY RECORD

FOR LABORATORY USE ONLY



CRL Environmental Corporation
1000 S. Berwind Court, Suite 1, Berwyn, PA, Industrial Park
 One Above Science Inc., Clark Forest Drive, Clarks Summit, Pennsylvania, Philadelphia
 Tel: (610) 538-2547 Fax: (610) 538-2547
 Tel: (610) 538-2547 Fax: (610) 538-2547

Lab. No. PD140691

Method of Transport:
 Walk-in Cooler
 UPS
 FED. EXP.
 CRL

Sample Condition Upon Receipt:
 1. CHILLED N 4. SEALED
 2. HEADSPACE (V/L) N 5. # OF SPLS MATCH COC
 3. CONTAINER INTG. N 6. PRESERVED

Customer: Glen S. Noiacono MCC

Project Name: ICP: RIVER RESTORATION Project # N/A

Address: MCC - Biral St. Dolores
 City: Mababacat State: _____ Zip Code: 2010

Logged By: YDY Date: 06/26/23 Time: 11:25

Relinquished by: (Signature and Printed Name) ANNIKKA GEORG COUA Date: 06/26/23 Time: 9 AM

Received by: (Signature and Printed Name) ANNIKKA BENITA ALTEZ Date: 6/26/23 Time: 09:58 H

SHIP TO LAB: (SUB CONTRACT) _____ TEST: _____ DATE: _____ CUSTOMER I.D. _____

Project Mgr. / Submitter: Glen S. Noiacono Date: 6/26/23 Signature: _____

Send Report To: gnnoiacono-mcc@gmail.com City: Mababacat State: _____ Zip: 2010

Special Instructions/Comments: Documentation
date 90629 partial final
7/2/2023

Unless otherwise requested, all remaining samples will be disposed of 15 days after the release of report.

Sample Archive / Disposal:
 Laboratory Standard
 Others
 Return To: _____

*\$10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL

Write Analytical Requested: CRITICAL 2 WORKDAYS

CIRCLE APPROPRIATE MATRIX:
 METALS
 METALS AND METALLOIDS
 DRINKING WATER
 INDUSTRIAL WASTEWATER
 WASTEWATER
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LAB USE ONLY	LAB NO.	SAMPLE I.D.	SAMPLE DESCRIPTION	SAMPLING DATE	SAMPLING TIME	ANALYSIS REQUESTED		TAT #	Type	PRESERVATION	REMARKS
						Matrix	Matrix				
	<u>PD140691-01</u>	<u>138 Drinking</u>	<u>Water - WASTE</u>	<u>20/23</u>	<u>8am</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
	<u>02</u>	<u>139 Drinking</u>	<u>Water - WASTE</u>	<u>20/23</u>	<u>8am</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
	<u>03</u>	<u>140 Drinking</u>	<u>Water - WASTE</u>	<u>26/23</u>	<u>6am</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

TAT starts 8 a.m. the following day sample received beyond 12 noon at

TAT: A = Overnight 5-24 hrs. B = Emergency Next Workday C = Critical 2 Workdays D = Urgent 3 Workdays E = Routine 7 Workdays

Preservatives: H=HCl N=HNO₃ S=H₂SO₄ C=<6°C Z=Zn(AC) O=NaOH T=Na₂S₂O₈



CRL Environmental Corporation

05 July 2023

Glen S. Nolasco

MCC - Rizal St., Dolores, Mabalacat City, Pampanga

Contact No.: 09771426735

ATTN: **Mr. Glen S. Nolasco**

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Very truly yours,


MARIA CARMELA Q. CAPULE, Ph.D.
Chief Operating Officer

In settlement of the following:	
Invoice No.	Amount
BH 10714	
Total Sales	₱ 3,940.00
Less: SC/PWD Discount	
Total Due	
Less: Withholding Tax	
Payment Due	₱ 3,940.00
Form of Payment:	
Cash <input checked="" type="checkbox"/>	Check <input type="checkbox"/>



CRL Environmental Corporation

Bldg. 2 Berthaphil Compound 1, Berthaphil Inc. Industrial Park,
 Jose Abad Santos Ave., Clark Freeport Zone (CFZ), Pampanga, 2023 Philippines
 Tel Nos.: (6345) 599-3943 • (6345) 499-6529 • (632) 8552-5100
 Fax: (6345) 599-3963
 Non Vat Reg. TIN: 005-650-419-00000
 Owned & Operated by CRL Environmental Corp.

No. 081582

OFFICIAL RECEIPT
(EXEMPT)

Date 09/15/23

Received from MABALACAT CIVIL COURTS with TIN _____

and address at MCC - PIZAL ST. BOWERS MAS CIVIL COURT

engaged in the Business style of _____

the sum of THREE THOUSAND NINE HUNDRED FORTY

pesos (P 3,940.00)

In partial/full payment for LAP ANSWERS

By: MARIA DANA BIC
Cashier/Authorized Representative

100 BkIts. (50x3) 080001-085000 • OCN: 21CAU20230000000204
 Date Issued: 05-09-2023
CITIZEN'S PRINTING PRESS
 VAT Reg. TIN: 129-722-248-00000
 Dau, Mabalacat City, Pampanga

Printer's Accreditation No. 21AMP20180000000029 / Date Issued: 09/26
 "THIS DOCUMENT IS NOT VALID FOR CLAIMING OF INPUT TAX"

APPENDIX N

Extension Request Letter



MABALACAT CITY COLLEGE
INSTITUTE OF ARTS AND SCIENCES

August 1, 2023

CAROL R. ARBOLEDA, LPT, MAEd
Kayantabe Manager
Dolores campus, Mabalacat City College

Dear Ma'am President,

On behalf of the Institute of Arts and Sciences, I would like to request your approval to extend our project to the community of Mabalacat City, Pampanga. Institute of Arts and Sciences proposed a project entitled ISIP River Restoration: Alleviating the Quality and Quantity of life on Freshwater Ecosystem Program. The aim of the project is to restore both aquatic and terrestrial ecosystems of diverse organisms and improve the water quality for the health and safety of the residents of Mabalacat City and its neighboring community. The project was pre-launched on June 26, 2023, and was led by IAS dean Marilyn S. Arcilla and coordinator of the project, Glen S. Nolasco together with the IAS faculty, AB History, and BS Biology students.

The activity was coordinated with the barangay official of Barangay Poblacion, Mabalacat City for a well-organized event. The pre-launching has been successful and productive, BS Biology students conducted biodiversity activity to collect samples of both fauna and flora that are present in the area. Sample water from the stream was submitted to the CRL testing facility for water quality testing. And authentication of the sample specimens is expected to be accomplished on or before August 21, 2023. The project is open for suggestions and further revision.

Hence, with the success of the pre-launching event, we would like to request your permission to pursue the extension of the community project for lifelong sustainability. We are hoping for your consideration, and we are looking forward to your feedback. Thank you for your time and God bless!



24 AUG 2023 000147





MABALACAT CITY COLLEGE
INSTITUTE OF ARTS AND SCIENCES

Prepared by:

JENNY LOU P. ATIENZA, LPT
IAS, Instructor

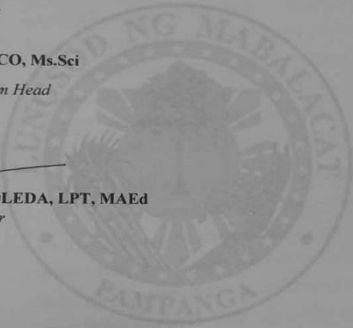
Noted by:

MARILYN S. ARCILLA, RN, LPT, MAN
Dean, IAS

GLEN S. NOLASCO, Ms.Sci
BSBiology, Program Head

Approved:

CAROL R. ARBOLEDA, LPT, MAEd
Kayantabe Manager



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APPENDIX O

Minutes of the meeting of the Institute concerning the Project



Republic of the Philippines
Province of Pampanga
Mabalacat City

MABALACAT CITY COLLEGE



INSTITUTE OF ARTS AND SCIENCES – JUNE MEETING

At MCC-Dapdap IAS Office at 12:00 p.m.

- I. Call to Order**
The dean of Institute of Arts and Sciences, Ms. Marilyn S. Arcilla, called to order the face-to-face meeting at MCC Dapdap – IAS Office.
- II. Roll Call**
Institute of Arts and Sciences Faculty and Admin
1. Marilyn S. Arcilla
 2. Arnel Perez
 3. Charmaine Lyn Dungca
 4. Arcelyn Adriano
 5. Cyrelle Nica P. Rivera
 6. Jonabelle De Leon
 7. April Ann Lim-Galang
 8. Edmon Sampana
 9. Gracia T. Canlas
 10. Mazylyn Pangan
 11. John Edward Alfonso
 12. Genesis Dimalanta
 13. Fernando Beiras
 14. Jhannaine Delasema
 15. Amiel Alfonso
 16. Mark Gerone Cayago
- III. Agenda**
- a. Uploading at IAS OneDrive
 - i. Final Examination
 - ii. Change of Grades
 - b. Submission of Grades
 - c. Completion of Course Requirements – INC
 - d. IAS ISIP Project
 - e. COS Daily Reporting at IAS Office
 - f. Schedule of Classes, Faculty Loadings, Parallel Classes, English Speaking Zones/Areas, & Worktext
- IV. Journal**
- a. Uploading at IAS OneDrive**
Dean Arcilla supervised the Institute of Arts and Sciences (IAS) Monthly Meeting. She discussed the uploading of pertinent documents at IAS OneDrive on or before June 29, 2023. The questionnaires, answer keys, table of specifications (TOS) and rubrics (for performance-based exam) for final examination week must be uploaded at OneDrive.
- b. Submission of Grades**
The IAS Dean highlighted the submission of semestral grades on or before July 25, 2023. She also discussed the clearance signing for contract of service (COS) and part-time instructors at the end of the semester. Another point she mentioned was the submission of pertinent documents for the change of grades. A letter composed by the instructor to the dean is also required stating the reason for the

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MABALACAT CITY COLLEGE

change of grade. Lastly, a proof or evidence is required to support the change of grade.

c. Completion of Course Requirements – INC

Moreover, Dean Arcilla also highlighted the submission of documents needed for the completion of course requirements for those students who are marked incomplete (INC). Similarly, a letter of to the dean is a must written by the instructor together with proof or evidence.

d. IAS ISIP Project

On IAS ISIP Project, Dean Arcilla and the BS BIO team announced the pre-launching of this project on June 26, 2023, at Mabalacat City Sapang Balen.

e. COS Daily Reporting at IAS Office

Dean Arcilla announced the COS faculty for their daily reporting at MCC Dapdap Campus starting on July 17, 2023. She also mentioned that every morning, faculty would arrange and fix the documents for accreditation. Further, the afternoon session would be for the updating of OBTLP and modules.

f. Schedule of Classes, Faculty Loadings, Parallel Classes, English Speaking Zones, & Worktext

Further, Dean Arcilla said that the schedule of classes and faculty loadings would be distributed once plotted. She also highlighted the change on the learning delivery set-up into parallel classes. On English Speaking Zones, she announced that the MCC Campus and its offices must use the English language as the medium of communication and/or instruction. Lastly, a worktext, additional part on the modules would be implanted.

V. Other Matters

None.

The meeting was adjourned at 12:30nn.

Prepared by:

Cyrelle Nica P. Rivera, LPT

Full-time Instructor

Noted by:

Marilyn S. Arcilla, MAN, LPT

Dean, IAS

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APPENDIX P
TOs and Memos



Republic of the Philippines
Province of Pampanga
Mabalacat City



MABALACAT CITY COLLEGE

INSTITUTE OF ARTS AND SCIENCES

Memo no. 15 s. 2023

TO : All IAS Faculty Members

FROM : IAS Dean

SUBJECT : Sapang Balen (Dolores River) Clean-Up Drive

Date : August 29, 2023

Please be informed that there will be a clean-up drive on August 30, 2023, 8am onwards at Sapang Balen (Dolores River).

For your information and compliance.

Marilyn S. Arcilla, RN, LPT, MAN
Dean, IAS



APPENDIX Q

Articles

Pampanga News Now
Hunyo 26 · 🌐

The Mabalacat City College **MCC - Institute of Arts and Sciences** embarked on an important journey towards environmental conservation with the launching of the "ISIP River Restoration: Alleviating the Quality and Quantity of Life on Freshwater Ecosystem".
<https://pampanganewsnow.com/mabalacat-city-college.../>



MCC - Institute of Arts and Sciences
Saraw · 🌐

Exploring Local Biodiversity: MCC Biology Students Lead Plant Specimen Collection Project

In a stride to better understand the city's natural environment, Mabalacat City College BS Biology faculty and students lead the collection and study of plant specimens on Sapang Balen from August 15-24, 2023. This is following the first phase of the Stream Restoration Project that was formerly launched last June 26, 2023.

This activity was vital to identify the diverse range of flora inhabiting the Sapang Balen area. Subsequently, it will effectively determine which species play beneficial roles in the restoration process, and conversely, which ones might prove detrimental.

Insights garnered from this plant specimen collection and analysis will serve as guide to the project's course. This will provide the ensuing steps required for the comprehensive restoration of Sapang Balen.

This endeavor holds significance for the documentation of local biodiversity, assessment of the surrounding ecosystem's health, educational enrichment, research and conservation prospects, and active engagement with the community.

This ongoing stream restoration project particularly addresses SDG 13 (Climate Action) and SDG 14 (Life Below Water), which exemplifies MCC's unwavering commitment to sustainable practices. By actively participating in projects that align with these global goals, MCC contributes to fostering academic excellence and reinforces its position as a community responsive institution.

MCC - Institute of Arts and Sciences
Saraw · 🌐

MCC IAS and CENRO Unite for Sapang Balen Stream Restoration

Mabalacat City College Institute of Arts and Sciences convened with the City Environment Resource Office (CENRO) last 6 July 2023. This deliberated the Sapang Balen project, embodying a collective commitment towards a greener and more sustainable future.

The Head of CENRO Engr. Jesusa Santiago and MCC IAS Dean Marilyn S. Arcilla spearheaded the meeting, together with the IAS instructors from Mabalacat City College. Their active involvement underscored the importance of a collaborative approach in community initiatives.

Central to the discussion was the overarching Sapang Balen project, which encompassed to vital objectives including:

Restoration or Development of Sapang Balen: The project could encompass the restoration or development of the Sapang Balen River, involving ecological restoration, community development, and sustainable resource management.

Environmental Conservation: With CENRO's involvement, the project has the potential to promote environmental conservation and protection in the Sapang Balen River. This might encompass habitat restoration, waste management, and biodiversity conservation.

Community Engagement: The active participation of Mabalacat City College's faculty members highlighted the profound significance of community engagement. The project envisioned prioritizing the active involvement of local communities in restoration and development efforts, ensuring that their needs and aspirations were duly


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Mabalacat Centro
Saraw · 🌐

CENRO Undertakes Manila Bay Clean-Up Drive in a Joint Effort with ISIP River Restoration

In promoting environmental sustainability and proper Solid Waste Management, the City Environment and Natural Resources Office, headed by Engr. Jesusa V. Santiago, and the Institute of Arts and Sciences under Mabalacat City College, led by Dean Marilyn S. Arcilla, LPT, MAN, have come together for the Manila Bay Clean-Up Drive Activity, "Makibahagi sa Solusyon, Huwag sa Polusyon" and the ISIP River Restoration Program. These initiatives aim to address the global issue of improper garbage disposal and provide a solution for it through ecological preservation. The activity mentioned above was carried out at Sapang Balen Creek (Brgy. Sta. Ines & Brgy. Mangalit, Middle Stream) Mabalacat City, Pampanga last Wednesday, August 30, 2023.



Aug 30, 2023 9:26:15, 22/23N 120:15



IAS Student Council

Hunyo 26 · 🌐



"Launching of IAS ISIP Program."

June 26, 2023

Sapang Balen, Mabalacat City, Pampanga

Mabalacat City College Institute of Arts and Sciences together with IAS Student Council and Science Society kickoff its First Phase of the ISIP River Restoration: Alleviating the Quality and Quantity of Life on Freshwater Ecosystem Program last June 26, 2023 at Sapang Balen, Mabalacat City, Pampanga.

The program starts with an Invocation from Ms. Arcelyn Adriano followed by the Opening Remarks from Dr. Romeo Erese III, Assistant Vice President for Academic Affairs. Mr. Glen Nolasco, Field of Study of the BS Biology discussed the phase of the program which will continue into the next generations of IAS Students.

Together with Brgy. Official from Brgy. Poblacion, IAS Dean, Ms. Marilyn Arcilla and Kayantabe Director, Ms. Carol Arboleda launched the IAS ISIP Program with a Ribbon Cutting. The program concluded with the closing remarks from Institute of Arts and Sciences Dean, Ms. Marilyn S. Arcilla.

#IASMalakas

#SDGgoals



Mabalacat City College

Hunyo 26 · 🌐



MCC IAS Initiates "Stream Restoration Project"

26 June 2023—Mabalacat City College (MCC) Institute of Arts and Sciences (IAS) launched the Stream Restoration Project in Sapang Balen. The project aims to revitalize the Sapang Balen community, improve the quality and quantity of the local freshwater ecosystem, and create better livelihood opportunities for its community members.

This is a part of MCC's "Innovative Sustainable Impactful Program (ISIP) River Restoration: Ameliorating the Quality and Quantity of Life on the Freshwater Ecosystem." Upon successful restoration, plans to plant various fruit-bearing trees and other flora along the streambanks will set in motion. This further enhances the environmental sustainability of the area and promote community empowerment in caring for the environment.

MCC is dedicated in championing programs and services aligned with the Sustainable Development Goals (SDGs). The river restoration project specifically addresses SDG 13, (Climate Action) and SDG 14 (Life Below Water), demonstrating the college's commitment to SDG projects.

The restoration project for Sapang Balen is a three-phased endeavor. Phase 1 involves an initial ocular visit and the official project launch. Phase 2 focuses on seeking monetary support and collaboration with the Local Government Unit (LGU) to further advance the project. Phase 3 centers on ensuring the continuity and sustainability of the project, guaranteeing its long-term impact.

With a clean and thriving stream, marine flora can flourish, offering a



MCG CARES | JUNE 29, 2023

Ni-record nang Live

Mabalacat City News



MABALACAT MCG CARES

APPENDIX R

Journals

Ocular Visitation and Identification of Physical and Chemical Features of the River Sites (Brgy. Mangalit and Brgy. Poblacion)

Due to the high problems arising starting from the garbage waste that we ignore on a daily basis and the pollution of rivers, we came up with the solution of restoring the wonders of nature in collaboration with the City Environment and Natural Resources Office (CENRO) and Institute of Arts and Sciences (IAS) under Mabalacat City College to conduct a project entitled, "River Restoration: Alleviating the Quality and Quantity of Life on the Freshwater Ecosystems."

On August 09, 2023, Wednesday, together with the Program Head of BS Biology, Mr. Glen S. Nolasco, M.Sc., Ms. Frenchie Ann B. Yamauchi, Engr. Anne Jerni Peña, Environmental Management Specialist II, with the two CENRO personnel, and the OJT trainees from Bachelor of Science in Biology, namely Ms. Giselle O. Santos, Ms. Kanela P. Mandal, and Ms. Maria Crezyl P. Chua, they conducted an ocular visitation on the two sites of Dolores River located at Barangay Mangalit and Barangay Poblacion, and they also identify the physical and chemical features of the said river sites.

The data gathered during the ocular visitation and identifying the physical and chemical features of the river site (Dolores River) located at Brgy. Mangalit and Brgy. Poblacion are as follows:

1. Chemical Features

a. pH level

During the ocular visitation at the Brgy. Mangalit, Mabalacat City, Pampanga of the target Dolores River (middle stream) to be the main project for the River Restoration, we collected, measured, and identified the pH level of the water randomly at the sites. The total average pH measured by the river is 7.29, which is neutral neither basic nor acidic.

Whereas at Brgy. Poblacion, Mabalacat City, Pampanga the total average pH measured at different sites of Dolores River is 7.54, which indicates that it is neutral because it has neither basic nor acidic qualities.

Manila Bay Clean-Up Drive Activity at Sapang Balen Creek (Barangay Santa Ines)

In Partnership with the ISIP River Restoration of IAS – Mabalacat City College

A. Introduction

As the soldier of the community in disseminating and setting as the number one motivator for cleanliness and promoting the implementation of proper Solid Waste Management in combatting the worldwide problem regarding the improper garbage disposals, the City Environment and Natural Resources Office (CENRO) headed by Engr. Jesusa V. Santiago, collaborates and supports the Manila Bay Clean-Up Drive Activity, “Makibahagi sa Solusyon, Huwag sa Polusyon” and has joined forces with the Institute of Arts and Sciences headed by Dean Marilyn S. Arcilla, LPT, MAN under Mabalacat City College aiming also for carrying out the ISIP River Restoration. Among the individuals involved on the aforementioned Clean-Up Drive activity includes 15 male street workers coming from CENRO, 5 males and 1 female CENRO employees, all the IAS faculties including 10 males, 6 females, and 1 female from KAYANTABE, and 3 female OJT student trainees from MCC.

On August 30, 2023, Wednesday, in a fair weather condition, the patrolling of the Sapang Balen Creek (Middle Stream) Area begins at 8:30 in the morning with the estimated 75-meter length of the area measured. After patrolling and examining the area, the clean-up drive activity then started with collecting and weighing different types of waste materials which includes the following data gathered:

B. Types of Waste Collected

In identifying the types of waste materials collected the Waste Analysis and Characterization Study also known as WACS is used as guidelines presented by the Mabalacat City CENRO and the following includes:

A. Residual Wastes

The residual wastes collected during the clean-up drive activity include some of the

Geographical Observations and Rock Collection

Casama, Iris Shane N.¹, Rivera, Sarah Mae M.², and Rizzo, Jade³

BACHELOR OF SCIENCE IN BIOLOGY 2A

Abstract

This study depicts the rock collection, pH level of the water, and geographical observation of the Sapang Balen River in Mabalacat City. The gathered rocks have been tentatively recognized as ingenious rock found in volcanoes. Sapang Balen flowing water has a pH of 7. Microorganisms were discovered in the water sample of the river. It was also noted to be rich in plants and biodiversity of many organisms such as fauna and flora.

Keywords: Geographical observation, water pH 7, Rock collection

Objectives:

1. Collect and identify rock samples taken from *Sapang Balen*.
2. Observe and describe the area through sensory observation and physical data and measurements.
3. Identify possible factors for pH level of *Sapang Balen* water.

1. Introduction

In the recent years change is inevitable so does change in our river the *Mabalacat City Sapang Balen river* has many wastes, algae, bad odor and some people used it as settlement leading to degradation of the river however it is still rich of organisms living in the river in hopes of it being restored, IAS embarked to survey and identify the environment to conserve our river, launching of "ISIP River Restoration". This ISIP River Restoration project have started on July 26, 2023, to exemplify the college's and institute's

critical to biodiversity and support numerous communities (IAS, 2023).

According to Marilyn S. Arcilla 2023, *Sapang Balen of Mabalacat City*, runs through several barangays in Mabalacat City, Pampanga, and is referred to as the Mabalacat River. It occupies over 485.20 acres of the city's territory and is positioned between the Sacobia and Quitangil rivers. This river flows from Mt. Pinatubo and is an aspect of Pampanga River Basin, comprising one of the eight main river basins in the Philippines in accordance to this

APPENDIX S

Permit to Collect Letters



August 9, 2023

Hon. JAYSON M. VIRAY
Barangay Captain
Mamatitang, Mabalacat City, Pampanga

Dear Hon. Viray:

In collaboration of the City Environment and Natural Resources Office (ENRO) with the Institute of Arts and Sciences under Mabalacat City College for the **Stream Restoration Program**, I am writing this letter with much enthusiasm that I endorse to your good office the request of **MR. GLEN S. NOLASCO, M.Sc.**, of MCC to conduct a specimen collection along Dolores River within Barangay Mamatitang's jurisdiction. *The following are the specific details of the activity:*

Activity: **Plant Specimen Collection**

Date: **Monday, August 14, 2023**

Time: **8:00am to 12:00nn**

Venue: **Dolores River, Area of Barangay Mamatitang**

We look forward to joining forces with the Barangay for the betterment of our environment. Thank you and God bless!

Very truly yours,


Engr. JESUSA M. SANTIAGO
City ENRO



August 9, 2023

Hon. FERNANDO G. MAGLALANG
Barangay Captain
Mangalit, Mabalacat City, Pampanga

Dear Hon. Maglalang:

In collaboration of the City Environment and Natural Resources Office (ENRO) with the Institute of Arts and Sciences under Mabalacat City College for the **Stream Restoration Program**, I am writing this letter with much enthusiasm that I endorse to your good office the request of **MR. GLEN S. NOLASCO, M.Sc.**, of MCC to conduct a specimen collection along Dolores River within Barangay Mangalit's jurisdiction. *The following are the specific details of the activity:*

Activity: **Plant Specimen Collection**

Date: **Monday, August 14, 2023**

Time: **8:00am to 12:00nn**

Venue: **Dolores River, Area of Barangay Mangalit**

We look forward to joining forces with the Barangay for the betterment of our environment. Thank you and God bless!

Very truly yours,


Engr. JESUSA M. SANTIAGO
City ENRO



August 9, 2023

Hon. GENER B. LAGMAN
Barangay Captain
Sapang Balen, Mabalacat City, Pampanga

Dear Hon. Lagman:

In collaboration of the City Environment and Natural Resources Office (ENRO) with the Institute of Arts and Sciences under Mabalacat City College for the **Stream Restoration Program**, I am writing this letter with much enthusiasm that I endorse to your good office the request of **MR. GLEN S. NOLASCO, M.Sc.**, of MCC to conduct a specimen collection along Dolores River within Barangay Sapang Balen's jurisdiction. *The following are the specific details of the activity:*

Activity: **Plant Specimen Collection**

Date: **Monday, August 14, 2023**

Time: **8:00am to 12:00nn**

Venue: **Dolores River, Area of Barangay Sapang Balen**

We look forward to joining forces with the Barangay for the betterment of our environment. Thank you and God bless!

Very truly yours,


Engr. JESUSA M. SANTIAGO
City ENRO

APPENDIX T
Review of MOU



Republic of the Philippines
MABALACAT CITY
Province of Pampanga



OFFICE OF THE CITY LEGAL
Email Address: citylegaloffice21.mcg@gmail.com

MEMORANDUM

FOR: ENGR. JESUSA M. SANTIAGO
City Environment and Natural Resources Officer

MR. FRANCO ALEJO L. MADLANGBAYAN
City Administrator

FROM: ATTY. FRANCIS A. DIMALIWAT
City Legal Officer
Mabalacat City, Pampanga

SUBJECT: REVIEW OF MOU BETWEEN CITY ENRO AND MCC FOR THE
RIVER RESTORATION PROJECT

DATE: July 18, 2023

Good day,

The City Legal Office received a request to review the proposed Memorandum of Understanding (MOU) between City Environment and Natural Resources Office (CENRO) and Mabalacat City College (MCC) for the River Restoration Project.

Undersigned has the following comments and observations:

1. CENRO does not possess a legal personality to enter into contracts or memoranda. The proper party to such subject memorandum of understanding should have been the Local Government of Mabalacat City instead of CENRO which only derives its existence from the Mabalacat City Government (MCG).

Likewise, MCC is also a Department of MCG and so it does not have any personality to enter into contracts with other departments.
2. Instead of being a MOU already, this should still be a project proposal subject to the approval of the City Mayor.
3. Likewise, there is concern over the budget of the project proposal. The proposal states that the project shall derive its expenses, honorarium, and the like from the department budget of CENRO. Undersigned recommends coordination to ensure sufficiency of funds to cover their project proposal.
4. The project duration should be clearly and distinctly specified in order to avoid any confusion and ambiguity as to the project's duration.
5. The mention of one Mr. Glen S. Nolasco would merely confuse and limit the responsibility of the project team to coordinate all activities relevant to the project. It is recommended that the responsibilities personally attributed to him are instead shared by the Project Team collectively.

Likewise, it is also asked that a profile of Marilyn S. Arcilla, RN, MAN is attached to the project proposal to aid and guide the City Mayor in approving or disapproving said proposal

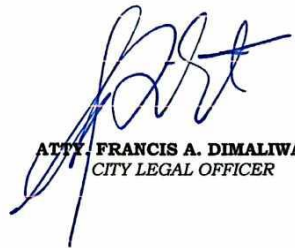
6. Based on the general provisions of the proposed MOU, any resulting paper or reports generated as a result of the subject project would involve sharing of credit with the relevant authors/co-authors/researchers/originators/and the like. The extends to any applicable intellectual property rights that may be created as a result of the findings of the subject project.

For your information and guidance.

Respectfully yours,



ATTY. ANDOLF FERNAN V. CAPARAS
LEGAL OFFICER



ATTY. FRANCIS A. DIMALIWAT
CITY LEGAL OFFICER

APPENDIX U

MOOE

River Restoration: Alleviating the quality and quantity of life on Freshwater ecosystem

MAINTENANCE AND OTHER EXPENSES (MOOE)

Item	Unit of Issue	Item Description	Quantity	Estimated Unit Cost	Estimated Cost
Physical Assessment					
1	Unit	pH Meter	1	2,500	2,500
2	L	Premium Gasoline (Grasscutter)	20	60	1,200
3	unit	Bush cutter	3	3,000.00	9,000.00
Microplastic Assessment					
4	Unit	LABALPHA 200 Mesh Lab Sieves, Test Sieve #200 Mesh, 4" Diameter, 304 Stainless Steel Wire Cloth (0.075mm)	1	1,650	1,650
5	Unit	Digital Professional Trinocular Stereo Zoom Microscope WF20X Eyepieces	1	25,000	25,000
6	L	Hydrogen peroxide solution (30% concentration) (500mL) Sigmaandrich**	1	11,000	11,000
Chemical Parameters (Lab Tests)					
7	Lab test	Ammonia	9	440	3,960
8	Lab test	Phosphate	9	600	5,400
9	Lab test	Total Dissolved Solids	9	400	3,600
10	Lab test	Color	9	250	2,250
11	Lab test	Turbidity	9	220	1,980
12	Lab test	Arsenic	9	850	7,650

[Initial-MOOE-of-River-Project.pdf](#)

APPENDIX V

Outcomes-based Teaching Learning Plans (OBTLPs) with SDGs



MABALACAT CITY COLLEGE

INSTITUTE OF ARTS AND SCIENCES

First Semester A.Y. 2023-2024

Outcome-Based Teaching and Learning Plan and Module Guide for *(Microbiology-FUNCORE 104)*



VISION: Mabalacat City College envisions itself to be the top choice in the community it serves for quality education and training by 2025.

MISSION: The Mission of Mabalacat City College is to meet the needs of its community as a center for learning aiming for open admission policy.

COURSE DESCRIPTION:

The lectures of this course cover the anatomy, physiology, and genetics of microorganisms, such as bacteria, algae, fungi, and protozoans. It also involves the study of the roles of microorganisms in the environment and their applications in industry and in medicine. Discussions on viruses, viroids, and prion particles are also included.

The laboratory course provides the students with practical experience in the study of microorganisms. Experiments are designed to include techniques for the identification of microorganisms based on their physical characteristics. Students will also be trained in the use of aseptic techniques for basic microbial application.

PROGRAM INTENDED LEARNING OUTCOMES (PILO) (BASED ON CMO):

1. Develop an in-depth understanding of the basic principles governing the science of life;
2. Utilize techniques/procedures relevant to biological research work in laboratory or field settings;
3. Apply basic mathematical and statistical computations and use of appropriate technologies in the analysis of biological data;
4. Extend knowledge and critically assess current views and theories in various areas of the biological sciences.



MABALACAT CITY COLLEGE

INSTITUTE OF ARTS AND SCIENCES

First Semester A.Y. 2023-2024

Outcome-Based Teaching and Learning Plan and Module Guide for *(Microbiology-FUNCORE 104)*



Week	Topic	Learning Materials (with references following OER plagiarism and IPR policies)	Intended Learning Outcomes (ILO)	Assessment Tasks (Requirements with schedule or time allotment)	Sustainable Development Goals (SDG) Coherence
GLOBAL KNOWLEDGE					
1-2	Microorganisms and Microbiology and Aseptic technique Microbial Cell Structure and Function	<p>Lecture Notes: PDF/Word format lectures that can be read for approximately 30-60 minutes. Mandigan, M.T., Martinko, J.M., Bender, K.S., Buckley, D.H., & Stahl, D.A. (2015). <i>Brock Biology of Microorganisms</i> (14th ed, pp. 2-19). Pearson. ISBN 978-0-321-89739-8.</p> <p>PowerPoint Presentation: 30-60 minutes approximately for each subtopic</p> <p>Suggested Web Readings: https://www.tmc.edu/microbiology-resource-center/lab-protocols/aseptic-technique https://pubmed.ncbi.nlm.nih.gov/15209075/#:~:text=Abstract,a%20microorganism%2C%20the%20microfungus%20Mucor</p> <p>Suggested Online Videos: Aseptic Technique https://www.youtube.com/watch?v=v0G8Hd6R-14 History of Microbiology https://www.youtube.com/watch?v=sbPaHZQ3rq4</p>	<p>Discuss the major focus of the microbiology and its importance.</p> <p>Highlight the development and history of microbiology as time progresses.</p>	<p>Drawing task. (Primitive Earth – Present – Future) 60 minutes</p> <p>Essay work. Scoring rubric will be given to the students. 60 minutes</p>	<p>SDG Nos.</p> <p>SDG 13: Climate Action</p> <p>SDG 14: Life Below Water</p> <p>SDG 15: Life on Land</p>





MABALACAT CITY COLLEGE
INSTITUTE OF ARTS AND SCIENCES

First Semester A.Y. 2023-2024



Outcome-Based Teaching and Learning Plan and Module Guide for *(General Ecology-FUNCORE 105)*

VISION: Mabalacat City College envisions itself to be the top choice in the community it serves for quality education and training by 2025.

MISSION: The Mission of Mabalacat City College is to meet the needs of its community as a center for learning aiming for open admission policy.

COURSE DESCRIPTION:

General Ecology is an introductory course on the biology and properties of ecological systems. It deals with the general concepts and principles pertaining to the complex pattern of interactions between the physical environment and the communities of the Earth. Focused on the methodologies pertaining to population and community structure and the assessment of environmental quality. Laboratory experiments are given as inquiry-based activities as a strategy in developing higher-order thinking skills and to supplement the content topics in the lecture.

PROGRAM INTENDED LEARNING OUTCOMES (PILO) (BASED ON CMO):

1. Develop an in-depth understanding of the basic principles governing the science of life;
2. Utilize techniques/procedures relevant to biological research work in laboratory or field settings;
3. Apply basic mathematical and statistical computations and use of appropriate technologies in the analysis of biological data;
4. Extend knowledge and critically assess current views and theories in various areas of the biological sciences.

PRE-REQUISITE: FUNCORE 101 and 102



MABALACAT CITY COLLEGE
INSTITUTE OF ARTS AND SCIENCES

First Semester A.Y. 2023-2024

Outcome-Based Teaching and Learning Plan and Module Guide for *(General Ecology-FUNCORE 105)*



Week	Topic	Learning Materials (with references following OER plagiarism and IPR policies)	Intended Learning Outcomes (ILO)	Assessment Tasks (Requirements with schedule or time allotment)	Sustainable Development Goals (SDG) Coherence
GLOBAL KNOWLEDGE					
1-2	Introduction to Ecology Natural History: Life on Land Preparation to Research in Ecology	<p>Lecture Notes: PDF/Word format lectures that can be read for approximately 30-60 minutes. Will be provided by the Instructor</p> <p>PowerPoint Presentation: 30-60 minutes approximately for each subtopic</p> <p>Suggested Web Readings: https://bio.libretexts.org/Bookshelves/Introductory_and_General_Biology/Book%3A_General_Biology_(Boundless)/44%3A_Ecology_and_the_Biosphere/44.01%3A_The_Scope_of_Ecology/44.1A%3A_Introduction_to_Ecology#:~:text=and%20its%20environment,An%20Introduction%20to%20Ecology,population%2C%20community%2C%20and%20ecosystem.</p> <p>Suggested Online Videos: https://www.youtube.com/watch?v=izRvPaAWgyw&t=181s</p>	<p>Discuss the rudimentary concepts of ecology and the life history.</p> <p>Explicit the foundation of ecological research.</p>	<p>In-situ activity for the students</p> <p>Essay work. Scoring rubric will be given to the students.</p> <p>60 minutes</p> <p>Due date: September 25-30, 2023</p>	<p>SDG Nos.</p> <p>SDG 13: Climate Action</p> <p>SDG 14: Life Below Water</p> <p>SDG 15: Life on Land</p>
	Life in Water	<p>Lecture Notes: PDF/Word format lectures that can be read for approximately 30-60 minutes.</p>	<p>Explain the concepts of life in water, vis-a-vis the River Restoration Project.</p>	<p>Short-Answer Essay.</p>	<p>SDG Nos.</p>

APPENDIX W

Micro credentials, Workshops, and Seminars

Institutes of Arts and Sciences

Courses	Title of the Microcredentials	# of Hours
Ecology	<i>In situ</i> Workshop of Practical field sampling	20 Hours
Microbiology	Laboratory Safety and Management	6 Hours
	General Principles of Various Aseptic Technique	6 Hours
General Zoology	Animal Handling/Care in accordance with ethical guidelines for research	6 Hours
General Botany	Plant specimen preservation: Fixation and Herbarium press	12 Hours
General Physiology/ Plant Physiology	Hands-on workshop: Necropsy, Extraction, and Fixation of major organs using Animal model	12 Hours
Human Anatomy and Physiology	General concepts of Histopathology in Animal model	6 Hours
Cell and Molecular Biology	Guide of Cytoarchitectural Assessment in Mouse tissue.	6 Hours
Bioinformatics	Workshop in Online tools and Software	6 Hours
Biostatistics	Workshop on Graph Pad Prism Latest version	6 Hours
World Politics and governance	Global Citizenship: Navigating World Politics and Governance in the Modern Era	6 Hours

IHTM TESDA NC

NC2 Front Office Services
 NC2 Housekeeping
 NC2 Bread and Pastry
 NC2 Cookery
 NC2 Travel Services
 NC2 Tour-guiding

ITE

Certificate in Professional Education (METHODS)

[Microcredentials-Workshop-Seminar-BSBIO-ABH.pdf](#)

APPENDIX X

DENR Administrative Order (DAO)



Republic of the Philippines
Department of Environment and Natural Resources
Visayas Avenue, Diliman, Quezon City
Tel Nos. 929-6626 to 29; 929-6633 to 35
928-7041 to 43; 929-6262; 929-1669
Website: <http://www.denr.gov.ph> / E-mail: web@denrgov.ph

DENR Administrative Order
No. 2016 -08

MAY 24 2016

SUBJECT: Water Quality Guidelines and General Effluent Standards of 2016

Pursuant to Section 19e and 19f of Republic Act (RA) 9275, otherwise known as the Philippine Clean Water Act of 2004, and Executive Order 192 (Providing the Reorganization of the Department of Environment, Energy and Natural Resources; Renaming it as the Department of Environment and Natural Resources) dated 10 June 1987, the Department of Environment and Natural Resources (DENR) hereby adopts and promulgates these Water Quality Guidelines (WQG) and General Effluent Standards (GES).

SECTION 1.0 Basic Policy. It is the policy of the State to pursue a policy of economic growth in a manner consistent with the protection, preservation and revival of the quality of our fresh, brackish and marine waters.

SECTION 2.0 Objectives. This Administrative Order is issued to provide guidelines for the classification of water bodies in the country; determination of time trends and the evaluation of stages of deterioration/enhancement in water quality; evaluation of the need for taking actions in preventing, controlling, or abating water pollution; and designation of water quality management areas (WQMA). In addition, this Order is issued to set the General Effluent Standards (GES).

SECTION 3.0 Scope and Coverage. The WQG applies to all water bodies in the country: freshwaters, marine waters, and groundwater; and shall be used for classifying water bodies, determining time trends, evaluating stages of deterioration or enhancement in water quality, and as basis for taking positive actions in preventing, controlling, or abating water pollution. Moreover, this WQG shall be used in the process of designating WQMA.

The GES applies to all point sources of pollution, regardless of volume, that discharge to receiving body of water or land. The GES shall be used regardless of the industry category.

SECTION 4.0 Definition of Terms. For purposes of this Order, the following terms shall have the following meanings:

a) "Annual Average" means the sum of all values in one year divided by the



1

/ 25





Republic of the Philippines
Department of Environment and Natural Resources
Visayas Avenue, Diliman, Quezon City
Tel Nos. (632) 929-66-26 to 29 · (632) 929-62-52
Website: <http://www.denr.gov.ph> / E-mail: web@denrgov.ph

APR 28 2021

**DENR ADMINISTRATIVE ORDER
NO. 2021 - 07**

SUBJECT : GUIDELINES ON THE ESTABLISHMENT OF LEGAL EASEMENTS ALONG THE SEAS, RIVERS, LAKES, ESTEROS, AND CREEKS

Pursuant to the provisions of Articles 634 and 638 of the Civil Code of the Philippines, Article 51 of Presidential Decree (P.D.) 1067 or the Water Code of the Philippines, P.D. 705 or the Revised Forestry Code, as amended, Commonwealth Act (C.A.) 141 or the Public Land Act, as amended, Executive Order (E.O.) 192 or the Reorganization Act of the DENR, Republic Act (R.A.) 7586, as amended by R.A. 11038 otherwise known as the ENIPAS Act, DENR Administrative Order (DAO) No. 99-21, DAO No. 2007-29 or the Revised Regulations on Land Surveys, and DENR Memorandum Circular (DMC) No. 2010-13 or the Manual on Land Survey Procedures, the following guidelines is hereby issued for the guidance of all concerned:

SECTION 1. Basic Policy. It is the policy of the State to ensure that the country's environment and natural resources are conserved, managed, developed and properly used including the protection of the people. As such, the State shall establish safeguard measures on the establishment of salvage zones and legal easements along seas, rivers, lakes, esteros, creeks, and other wetland areas.

SECTION 2. Objective. This Order aims to provide guidelines on the establishment of legal easement for public use in the interest of recreation, navigation, floatage, fishing and salvage in accordance with the existing laws and regulations.

SECTION 3. Scope and Coverage. This Order shall apply to all lands adjoining seas, rivers, lakes, creeks, esteros and other wetland areas.

SECTION 4. Definition of Terms. As used in this Order, the following terms shall be defined as follows:

- 4.1 **Creek** - a stream of water longer than a brook or small stream that empties into the rivers.
- 4.2 **Estero** - any bed or channel through which stagnant, dirty or salt water flows under the influence of the tide.
- 4.3 **Lake** - an expanded part of a river or an inland body of standing water.
- 4.4 **Legal Easement** – an easement by necessity constituted by law which has for its object either for public use or the interest of private persons.

APPENDIX Y

City Ordinance 2016



REPUBLIC OF THE PHILIPPINES
Province of Pampanga
Mabalacat City

OFFICE OF THE SANGGUNIANG PANLUNGSOD
Website: www.mabalacatcity.gov.ph • Email: spmabalacatcity@gmail.com

Jan 2, 2017

MINUTES OF THE 121ST REGULAR SESSION OF THE SANGGUNIANG PANLUNGSOD OF MABALACAT CITY, PAMPANGA HELD ON FEBRUARY 10, 2016 AT JADE HALL, (LOT ONLY) XEVERA TABUN, MABALACAT CITY, PAMPANGA

PRESENT: Hon. Christian C. Halili - Presiding Officer/Vice Mayor
Hon. Benjamin D. Jocson - Member
Hon. Gerald Guttrie P. Aquino - Member
Hon. Froylan L. Galang - Member
Hon. Roland D. Peña - Member
Hon. Rogelio Q. Yumul - Member
Hon. Krizzanel C. Garbo - Member
Hon. Eduardo D. Sotto - Member
Hon. Carlo Nino C. Rivera - Member
Hon. Dwight Oliver P. Morales - Member
Hon. Oscar R. Aurelio, M.D. - Member

ABSENT: Hon. Amauri M. Tiglao - Member
Hon. Ruvielane S. Margarito - Member

CITY ORDINANCE NO. 45
Series of 2016

AN ORDINANCE
ENACTING THE ENVIRONMENT CODE OF MABALACAT CITY, PROVINCE OF PAMPANGA

Sponsored by: Hon. ROLAND D. PEÑA

Be it enacted by the Sangguniang Panlungsod of Mabalacat City in session assembled, that:

ARTICLE I : TITLE OF THE ORDINANCE

Section 1. Title of the Ordinance. This Ordinance shall be known as the Environment Code of Mabalacat City, Province of Pampanga, and shall be hereinafter referred to as the Code.

ARTICLE II : AUTHORITY

Section 2. Authority. This Code is enacted pursuant to the following laws:

a) 1987 Philippine Constitution – particularly:

(1)

ANNEX A

Article Links

Annex A.1: Mabalacat MCG Cares

https://www.facebook.com/watch/live/?ref=watch_permalink&v=228910486628265 (June 29, 2023)

Annex A.2: MCC IAS initiates “Stream Restoration Project”

<https://www.facebook.com/TheOfficial.MCC/posts/pfbid021tKmfCJQicLYzn26ce1qwra4DK63Z6m22Bms1K7CtZ91iaaZvpxvNdVVP8Wqbixhl> (June 26, 2023)

Annex A.3: Launching of IAS ISIP Program

<https://www.facebook.com/IASISCStudentCouncil/posts/pfbid02Rfkss6MixDiFcQY9vx1fyzTKLQdx9E7AxMW2z2ZEbE7rFRrTH93jyPYwjzhP9nGl> (June 26, 2023)

Annex A.4: River Clean-up drive (Mabalacat CENRO)

<https://www.facebook.com/cenro.mabalacat.1/posts/pfbid02GUvPAH1KSS2q9yvMKki7HQWC6yUchfR6Vg9yAodgxf14WN8d93BqdZepE6vTu5ckl> (August 30, 2023)

Annex A.5: The Mabalacat City College **MCC - Institute of Arts and Sciences** embarked on an important journey towards environmental conservation with the launching of the “ISIP River Restoration: Alleviating the Quality and Quantity of Life on Freshwater Ecosystem” (Pampanga News Now)

<https://www.facebook.com/pampanganewsnow/posts/pfbid032YYejfvGNiVaQ9nV2iBSCNTKwW6GN6objE83gAVr4CytKxjoAbXiuzKCGNmjxyMCI> (June 26, 2023)

Annex A.6: MCC IAS and CENRO Unite for Sapang Balen Stream Restoration

<https://www.facebook.com/IASMCC/posts/pfbid0Vg3kzPaX2aVPxjEtmPpNm1ygah1nBcaWHLWF7ymC7FBfKcx7KbLMsdHcsOf3wHcGl> (July 6, 2023)

Annex A.7: Exploring Local Biodiversity: MCC Biology Students Lead Plant Specimen Collection Project

<https://www.facebook.com/IASMCC/posts/pfbid0br9YmwMX9oKJ8ywnvJfLk3VFD8Zpkr72yxYgYwFUTDcNTysnpdf9dpkou5Fh82S2l> (June 26, 2023)

Annex A.8: Greening the Waters: MCC IAS and CENRO Unite for Sapang Balen River Clean-Up Campaign

<https://mcc.edu.ph/post/greening-the-waters-mcc-ias-and-cenro-unite-for-sapang-balen-river-clean-up-campaign>

Annex A.9: MCC IAS Initiates Stream Restoration Project

<https://mcc.edu.ph/post/mcc-ias-initiates-stream-restoration-project>

Annex A.10: MCC IAS and CENRO Unite for Sapang Balen Stream Restoration

<https://mcc.edu.ph/post/mcc-ias-and-cenro-unite-for-sapang-balen-stream-restoration>