



Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
PROVINCIAL ENVIRONMENT AND NATURAL RESOURCES OFFICE

October 5, 2022



MEMORANDUM

FOR : The Regional Executive Director
MIMAROPA Region
1515 L&S Bldg., Roxas Blvd.
Ermita, Manila

THRU : The ARD for Technical Services

FROM : The OIC, PENR Officer
Mamburao, Occidental Mindoro

SUBJECT : ENDORSEMENT OF THE ACTIVITY DESIGN FOR THE
TRAINING ON THE DETECTION OF THE TAMARAW AND
BLEEDING HEART PIGEON USING SCIENTIFIC AND
INDIGENOUS TECHNIQUES IN SUPPORT OF THE BD COR
PROJECT TO THE TAMARAW CONSERVATION PROGRAM
AND MT. CALAVITE WILDLIFE SANCTUARY

In line with the service and implementation of the *Integrated Approach in the Management of Major Biodiversity Corridors in the Philippines (BD Cor Project)*, the undersigned endorses the submitted activity design for the “Training on the Detection of Tamaraw and Mindoro Bleeding Heart Pigeon in Protected Areas in Support of the Tamaraw Conservation Program (TCP) and Mt. Calavite Wildlife Sanctuary – Protected Area Management Office (MCWS-PAMO)”. The activity finds packaging in Component 4 of the BD Cor Project, which entails “knowledge management, gender mainstreaming, learning, monitoring, and evaluation”, in line with the 2022 Tamaraw Month Celebration.

The activity will be from October 19 to October 22, 2022 involving personnel from TCP, MCWS-PAMO, CENR Office in San Jose (as point personnel in the 2019 Tamaraw Survey in MCWS), and BD Cor Project from DENR; local government units in Paluan, Occidental Mindoro; and conservation partners. The latter shall provide presentations with the goal of capacitating DENR and LGU personnel, and indigenous communities with the various scientific methods, as well as, sharing local knowledge through a cultural night.

For information and approval.


ERNESTO E. TAÑADA



Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
PROVINCIAL ENVIRONMENT AND NATURAL RESOURCES OFFICE

October 5, 2022

MEMORANDUM

FOR : The OIC, PENR Officer

THRU : The In Charge, Technical Services Division

FROM : The Regional Landscape Planning Specialist
Corridor Project Management Unit
Biodiversity Corridor Project

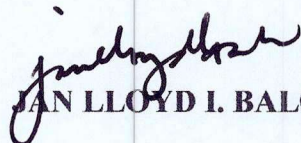
SUBJECT : SUBMISSION OF THE ACTIVITY DESIGN ON THE
DETECTION OF TAMARAW AND MINDORO BLEEDING
HEART IN PROTECTED AREAS USING SCIENTIFIC AND
INDIGENOUS PERSPECTIVES IN SUPPORT OF THE
TAMARAW CONSERVATION PROGRAM AND MT.
CALAVITE WILDLIFE SANCTUARY – PROTECTED AREA
MANAGEMENT OFFICE

In line with the service and the fulfillment of the activities supported by the *Integrated Approach in Management of Major Biodiversity Corridors in the Philippines (BD Cor Project)* for the celebration of the Tamaraw Month 2022, the undersigned submits the activity design on the “Detection of Tamaraw and Mindoro Bleeding Heart in Protected Areas using Scientific and Indigenous Perspectives in Support of the Tamaraw Conservation Program (TCP) and Mt. Calavite Wildlife Sanctuary – Protected Area Management Office (MCWS-PAMO)”. The activity shall be on October 19 to 22, 2022 and will involve staff from TCP, CENRO San Jose (as point personnel during the conduct of the 2019 Tamaraw Survey), and MCWS-PAMO from DENR; Municipal Environment and Natural Resources Office (MENRO) of Paluan; and conservation partners (D’Aboville Foundation and Demo Farm, Inc. and Mindoro Biodiversity Conservation Foundation, Inc.).

The training is for the provision of technical support for the TCP and MCWS-PAMO, which will facilitate the scientific processes and techniques in the detection of the two banner species of the BD Cor Project, i.e., *Bubalus mindorensis* (tamaraw) Heude, 1888 and *Galicollumba platenae* (Mindoro bleeding-heart pigeon) Salvatori, 1893). These species are known to occur within the protected area per the 2019 Tamaraw Survey and bird assessment in 2013, respectively. The latter is the last known record of the species for Occidental Mindoro. These activities find support with the conservation partners and are responsible for the knowledge base for *B. mindorensis* and other species in the corridor.

The training will find presentations from the conservation partners and will culminate with a cultural night, which will serve as the venue for information sharing and exchange of indigenous mechanisms for detection of species. This will also serve as a venue for streamlining indigenous cultures and conservation, as packaged in Component 4 of the BD Cor Project (*Knowledge management, Gender mainstreaming, Learning, Monitoring, and Evaluation*).

For information, review, and recommendation for approval.


JAN LLOYD I. BALON

Integrated Approach in Management of Major Biodiversity Corridors of the Philippines

ACTIVITY DESIGN

TITLE : Training on the Detection of Tamaraw and Mindoro Bleeding Heart Pigeon in Protected Areas using Scientific and Indigenous Perspectives in Support of the Tamaraw Conservation Program and Mt. Calavite Wildlife Sanctuary – Protected Area Management Office

DATE : October 20 to 22, 2022 (Tentative)

VENUE : Paluan, Occidental Mindoro

I. BACKGROUND AND RATIONALE

Implementation of the project entitled, “**Integrated Approach in Management of Major Biodiversity Corridors of the Philippines**” or **BD Cor Project**, is a multi-agency commitment and convergence of management through the Department of Environment and Natural Resources (DENR) and funded by the Global Environment Facility (GEF) and the United Nations Development Programme (UNDP). The BD Cor Project aims to “*operationalize integrated management of biodiversity corridors to generate multiple benefits including effective conservation of globally threatened species and high conservation value forests, reduce deforestation and degradation and enhance local biodiversity-friendly livelihoods*”. These will be addressed through the reduction of threats and pressures involving conflicts in land utilization, physical developments, deforestation and degradation of ecosystems, increasing human-wildlife conflicts, pollution – including the introduction and proliferation of invasive alien species (IAS), and impacts of climate change.

The implementation of the BD Cor Project has four major components, which were designed to encapsulate the integrative framework towards better governance of the biodiversity corridor as summarized below:

Component 1	Effective coordination and governance framework for integrated ecosystem management in the Philippines biodiversity corridors system
Component 2	Application of integrated network design and management of biodiversity corridors to ensure continued stability and sustainability of their biological, ecosystem services and socio-economic conservation values
Component 3	Community-based sustainable use and management systems in the two pilot biodiversity corridor systems in the Philippines
Component 4	Knowledge management, gender mainstreaming, learning, monitoring, and evaluation

Motivations of the current initiative revolve on simultaneous project implementation within protected areas and, as an additional activity, empowering species ownership in the entire corridor. Moreover, the BD Cor Project entails providing connectivity between key biodiversity areas (KBAs) with habitat centroids in protected areas. The initiative also

Integrated Approach in Management of Major Biodiversity Corridors of the Philippines

highlights the multi-species detection partnered with organizations with impetuses for biodiversity conservation and management.

In the entire Mindoro Biodiversity Corridor (MBC), a divide on the northern juridical localities significantly affects overall analyses on connectivity and abound by socio-political and demographic conflicts. Since the establishment and usage of the national highway from Abra de Ilog to Mamburao, Occidental Mindoro, the KBA of Mt. Calavite and the encompassing protected area – Mt. Calavite Wildlife Sanctuary (MCWS), located in Paluan, Occidental Mindoro, had been practically isolated with the rest of the corridor. This presents a number of challenges in terms of movements of biodiversity and, in turn, the overall connectivity with the rest of the biological complexes in MBC:

- While road networks, if these are roads alone, have net zero (0) impact to corridor connectivity, the construction and usage of the national highway attracted development and, in turn, settlements, which effectively deter species movement from disturbance;
- Emergence of settlements in the corridor, specifically along the stretch of major transportation conduits, have motivated the conversion of lowlands – principally lowland forests – to extensive agricultural areas, which provide the economic base of localities and the entire Province of Occidental Mindoro from production of grain and, seasonally, lowland vegetable commodities;
- Agriculture invites and assimilates local and indigenous communities (i.e., in this case *Iraya-Mangyan*) for accelerated conversion of areas within their ancestral domains (ADs), which had sustainable practices with production of upland and rain-fed rice varieties, root crops, and highland vegetables; and
- Current socio-political factors skew to increasing economic bases with enterprise development, which do not have sufficient environmental safety nets.

These causalities had adverse impacts on establishing appropriate biodiversity pathways and refugia for species movements and genetic exchange. The latter encompass the current postulations with *Bubalus mindorensis* (tamaraw) Heude 1888, particularly the very poor detection and lack of sufficient evidence on the presence of the species in MCWS. Additionally, lowland forests and ecosystems, which underwent the greatest conversions in the entire corridor, are determined habitats of the *Gallicolumba platenae* (Mindoro Bleeding Heart Pigeon) Salvadori 1893. The species, similar with *B. mindorensis*, had not been sufficiently detected and studied within the protected area. These species are highlighted, among the other fauna within the protected area, as the banner for protection, conservation, and connectivity of KBAs and OECMs with the implementation of the BD Cor Project.

Current efforts for conservation in the protected area focus on the rediscovery of *B. mindorensis*, which was undetected for 25 years. As the main program for conservation of *B. mindorensis*, TCP conducted expeditions for species detection in 2019. These yielded positive results in terms of the detection of large mammals (i.e., *Sus oliveri*, Mindoro Warty Pig and *Rusa Marianna*, Philippine Brown Deer) and detected one juvenile individual of the species. However, without appropriate documentation, the latter is still under speculation with anoa experts and specialists of the International Union for Conservation of Nature (IUCN). However, the same cannot be said for the *G. platenae* with most recent discovery in MCWS in 2013. It is also postulated that there might have been localized extirpation of the species

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because of the increasing activities within the lowland forest areas of MCWS. These knowledge base on the highlighted species would not be possible without the partnered efforts with organizations dedicated for biodiversity conservation.

Among conservation partners in MCWS, the Mindoro Biodiversity Conservation Foundation, Inc. (MBCFI) and D'Aboville Foundation and Demo Farm, Inc. (DAF) are the most active. The MBCFI is a member of the Protected Area Management Boards (PAMBs) in the entire Mindoro Island and provides scientific and technical support for novel initiatives in line with tamaraw and biodiversity detection for conservation. The organization also centers its operations to provide support for monitoring of the species found in the entire island. On the other hand, DAF is a collective of international and local experts, initially, for tamaraw, but had sufficiently expanded operations to reduce human-wildlife conflicts within indigenous communities. Currently, DAF's support to MCWS comes from the technical and logistical support to, first, detect the tamaraw and, second, to increase knowledge and awareness for other important and equally threatened species.

The BD Cor Project's roles in streamlining awareness of the key species for management are integrative for the overall landscape planning for multi-species conservation. While the initiative finds funding under Component 4 and for the Tamaraw Month Celebration, it is crucial to promote both species for start-up of implementation in MBC. These are foreseen to be precursory to the integrating approaches of the BD Cor Project with objectives on shared governance on biodiversity conservation and management, promotion of sustainable and community-based forest management, and providing knowledge for the appreciation of future generations.

II. OBJECTIVES

General Objective: Showcase the counting activities conducted annually and the capabilities of the TCP and PAMO Rangers with the detection of species using both scientific methodologies and indigenous knowledge.

Specific Objectives:

1. Provide an overview of the BD Cor Project, specific to MBC;
2. Present the conservation efforts for tamaraw and other important species of TCP and conservation partners;
3. Promote appreciation of species conservation and biodiversity management among multiple sectors and stakeholders, but with focus on the youth and indigenous groups;
4. Provide technical and indigenous knowledge on the detection of tamaraw and other important species; and
5. Raise awareness in line with the celebration of the 2022 Tamaraw Month.

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III. EXPECTED OUTCOMES AND OUTPUTS

Outcomes	<ol style="list-style-type: none"> 1. Indigenous youth will have deeper appreciation on protected area management and species conservation 2. Adjoining personnel will gain knowledge on the scientific and indigenous techniques for detection of species 3. Conservation efforts will find streamlining with localized initiatives and identifying components for integrated management
Outputs	<ol style="list-style-type: none"> 1. Documented learning of adjoining participants through on-site approaches 2. Documented methodologies utilized by partners for perusal of overall project support in the multi-year implementation 3. Integrative components for management identified and enumeration for implementation in protected areas and ICCA

IV. METHODOLOGY

Pre-training activities

1. Drafting and sending out of coordination letters for the *Punong Barangay* of Harrison and Municipal Mayor of Paluan for the conduct of the activity
2. Drafting and sending out of invitation letters for MBCFI and DAF as resource speakers for the activity
3. Drafting and sending out letters for other DENROs with biodiversity units / operations
4. Drafting and sending out letters for indigenous peoples for participation
5. Coordination with MCWS-PAMO for knowledge and approval of PAMB
6. Coordination with TCP for logistics and ground support for the activity
7. Preparatory meeting with key officials of LGUs in Paluan for insight alignment and implementation support
8. Preparation of presentations on the BD Cor Project for awareness-building and tamaraw conservation efforts of DENR through TCP and conservation partners

Training proper

1. Presentation of the BD Cor Project overview
2. Presentation of the tamaraw conservation efforts of TCP
3. Presentation of the detection methodologies by conservation partners
4. Sharing of indigenous knowledge in a cultural night activity
5. On-site application of training knowledge through bird watching and camping activities in accessible areas with the ecological parameters suitable for inhabitation of tamaraw and other large mammals

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Working Days (Tentative)

Working Days	Tentative Dates	Activity
Day 0	October 19, 2022	<ul style="list-style-type: none"> Travel time of PENR Office personnel, MBC-CPMU, and selected TCP Participants to Paluan Pre-training assembly for refinement and final logistical checks
Day 1	October 20, 2022	<ul style="list-style-type: none"> Alignment meeting and activity orientation with key officials of LGUs in Paluan (<i>Note: For coordination with the Municipal Environment and Natural Resources Office (MENRO) for maximum participation for provision of logistical support</i>) <p><u>Training Day 1</u></p> <ul style="list-style-type: none"> Presentation of BD Cor Project Presentation of Tamaraw Initiatives Presentation of Findings of the Tamaraw Survey 2022 Presentation of Training Mechanics
Day 2	October 21, 2022	<p><u>Training Day 2</u></p> <ul style="list-style-type: none"> Knowledge-sharing and training of adjoining participants through presentations of MBC-CPMU, TCP, MCWS-PAMO, and conservation partners Cultural night and indigenous knowledge-sharing
Day 3	October 22, 2022	<p><u>Training Day 3</u></p> <ul style="list-style-type: none"> On-site application of knowledge in accessible areas within Barangay Harrison through a bird watching / hiking activity Awarding of certificates / tokens Activity wrap-up Post-activity assessment Return of adjoining participants to respective official workstations and homes

V. TARGET PARTICIPANTS

Organization / Office / Affiliation / Person	Prospective Participants	Number of Participants
LGUs in Paluan		20
Barangay LGU of Harrison	As represented by <i>Punong</i> Barangay, Barangay Council Members, and Barangay Peace and Order Officials	10
Municipal LGU	As represented by the Municipal Mayor and accompanied by MENRO and uniformed personnel	10
Department of Environment and Natural Resources		25
PENR Office		1
	Noriel M. Dulatre – <i>PMF</i>	
CENR Office – San Jose		2

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Organization / Office / Affiliation / Person	Prospective Participants	Number of Participants
	Maria Teresita P. David, Jr.* – <i>Unit Head, BMU</i> Herold S. Castro – <i>FT II</i>	
MCWS-PAMO		11
	Arlene V. Francisco – <i>Protected Area Superintendent (PASu)</i> Josie R. Corpuz – <i>PAMO Staff (Permanent)</i> Marites M. Castillo – <i>PAMO Staff (Permanent)</i> Jolly Mancilla – <i>PAMO Staff (Permanent)</i> Maria Cecilia M. Abejar – <i>PAMO Staff (COS)</i> Jasmine Sabangan – <i>EMS I (COS)</i> Jonas Rendon – <i>Park Ranger</i> Von Edward Ballesteros – <i>Park Ranger</i> Engelbert Cababay – <i>Park Ranger</i> Daniel Villanueva – <i>Park Ranger</i> Omar Christopher Villas – <i>Park Ranger</i>	
TCP		7
	Neil Anthony A. Del Mundo – <i>Coordinator</i> Eduardo B. Bata – <i>Tamaraw Ranger IV</i> John Ramer G. Casuncad – <i>Community Development Assistant</i> Alvin N. Tabuga – <i>Technical Staff</i> Geronimo S. Barcena – <i>Tamaraw Ranger III</i> Gener B. Fantuyaw – <i>Tamaraw Ranger III</i> Arjay R. Dapnatapu – <i>Tamaraw Ranger I</i>	
BD Cor Project (MBC-CPMU)		4
	Jan Lloyd I. Balon – <i>RLPS (Head of Activity and Secretariat)</i> Clinth Jezter G. Dela Cruz – <i>CSC (Head of Documentation)</i> Hired Drivers	
MBCFI	Kathy Lene S. Cielo – <i>MBCC Manager</i> Elyza Hazel P. Tan – <i>Research Officer</i>	2
DAF	Emmanuel Schutz – <i>Program Director</i> Fernando Garcia Gil – <i>Wildlife Conservation Research Officer</i> Rodolfo B. Santos, Jr. – <i>Program Assistant / Community Officer</i>	3
Community Members		30
TOTAL		80

* As point person for the conduct of the 2019 Survey and for knowledge-sharing

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VI. ITINERARY / PROVISIONAL PROGRAM

Date/Time	Activity	Responsible Personnel
<i>Day 0 (October 19, 2022)</i>		
01:00 PM – 04:00 PM	Travel of adjoining DENR personnel, BD Cor Project Staff, and conservation partners to MCWS-PAMO	Secretariat
04:00 PM – 05:00 PM	Courtesy call to PASu and MCWS-PAMO personnel	CPMU PENR Office Personnel CENR Office Personnel MCWS-PAMO TCP Personnel MBCFI DAF
5:00 PM	<i>Dinner</i>	
<i>Day 1 (October 20, 2022)</i>		
<u>Training Day 1</u>		
08:00 AM – 09:00 AM	<i>Breakfast</i>	CPMU PENR Office Personnel CENR Office Personnel MCWS-PAMO TCP Personnel MBCFI DAF
09:00 AM – 12:00 NN	Alignment meeting and activity orientation with LGUs in Paluan	CPMU PENR Office Personnel CENR Office Personnel MCWS-PAMO TCP Personnel MBCFI DAF
	<ul style="list-style-type: none"> Prayer and National Anthem Welcome Remarks Activity Presentation 	Secretariat Municipal LGU – Paluan CPMU, RLPS TCP Coordinator
	<ul style="list-style-type: none"> Open Forum and Discussion Closing Remarks 	Secretariat PASu – MCWS
	<i>Snacks (served during the meeting)</i>	
12:00 NN – 01:00 PM	<i>Lunch</i>	
01:00 PM – 02:00 PM	Travel of adjoining participants to MCWS-PAMO	Secretariat MCWS-PAMO
02:00 PM – 02:30 PM	Registration of Participants	
02:30 PM – 05:00 PM	Training Proper	
	<ul style="list-style-type: none"> Prayer and National Anthem Welcome Remarks Message Presentation of BD Cor Project Overview 	Secretariat Barangay LGU – Harrison Municipal LGU – Paluan CPMU, RLPS

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Integrated Approach in Management of Major Biodiversity Corridors of the Philippines

Date/Time	Activity	Responsible Personnel
	<ul style="list-style-type: none"> • Presentation of Protected Area Management Activities and Birds of Calavite • Presentation of Conservation Activities on Tamaraw • Presentation of Findings of the 2019 Tamaraw Survey in MCWS • Presentation of Training Mechanics / Camp Activities 	PASu – MCWS / Representative TCP Coordinator Tamaraw Ranger IV CENR Office – San Jose CMPU, CSC
	-- End of Day 1 Activities --	
<i>Day 3 (October 21, 2022)</i>	<i>Training Day 2</i>	
06:00 AM – 07:00 AM	Travel of adjoining participants to <i>Sitio Hinugasan</i> <i>Breakfast</i>	CPMU PENR Office Personnel CENR Office Personnel TCP Personnel
08:00 AM – 12:00 NN	Training Proper <ul style="list-style-type: none"> • Presentation of techniques in tamaraw detection • Presentation on bird identification and detection <i>Snacks</i>	Secretariat MBCFI DAF
12:00 NN – 01:00 PM	<i>Lunch</i>	
01:00 PM – 05:00 PM	<ul style="list-style-type: none"> • Indigenous knowledge-sharing • Discussion of on-site identification mechanics <i>Snacks</i>	Secretariat MCWS-PAMO Indigenous PAMO / TCP Staff
05:00 PM – 08:00 PM	Cultural Night <i>Dinner</i>	Secretariat MCWS-PAMO Indigenous PAMO / TCP Staff
08:00 PM	<i>Lights Off</i> -- End of Day 2 Activities --	
<i>Day 4 (October 22, 2022)</i>	<i>Training Day 3</i>	
05:00 AM – 09:00 AM	Short hike / Bird watching (<i>Note: Possible stops to point areas with ecological parameters for inhabitation of large mammals</i>)	MBCFI, DAF, TCP
06:00 AM – 09:00 AM	Return to camp site <i>Snacks</i>	Secretariat MCWS-PAMO
09:00 AM – 11:00 AM	Awarding of Certificates / Tokens	Secretariat MCWS-PAMO TCP Coordinator
11:00 AM – 12:00 NN	Closing Remarks Training wrap-up Post-activity assessment	TCP Coordinator Secretariat
12:00 NN – 01:00 PM	<i>Lunch</i>	
01:00 PM	Return of all participants to official work stations / homes**	

* To be picked up in school grounds

** Students to be ferried to respective homes / designated drop-off points

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Integrated Approach in Management of Major Biodiversity Corridors of the Philippines

VII. BUDGETARY REQUIREMENTS

Summary	Assumptions			Budget (PHP)
	Provision	Unit Cost (PHP)	Number / Unit	
Representation Expenses	Day 0			9,000.00
	Dinner	300.00	30 pax	9,000.00
	Day 1			53,500.00
	Breakfast	200.00	30 pax	6,000.00
	AM Snacks	150.00	50 pax	7,500.00
	Lunch	350.00	50 pax	17,500.00
	PM Snacks	150.00	50 pax	7,500.00
	Dinner	300.00	50 pax	15,000.00
	Day 2			71,000.00
	Breakfast	200.00	50 pax	10,000.00
	AM Snacks	150.00	50 pax	7,500.00
	Lunch	350.00	50 pax	17,500.00
	PM Snacks	150.00	80 pax	12,000.00
	Dinner	300.00	80 pax	24,000.00
	Day 3			35,000.00
	Breakfast	200.00	50 pax	10,000.00
	AM Snacks	150.00	50 pax	7,500.00
	Lunch	350.00	50 pax	17,500.00
Sub-total				168,500.00
Accommodation* Expenses	Venue	5,000.00	1 room x 2 day	10,000.00
Sub-total				10,000.00
Travel Expenses	Vehicle Rental	8,000.00	1 van x 4 days	32,000.00
Sub-total				32,000.00
Tokens	Tokens	1,000.00	7 pax	7,000.00
Sub-total				7,000.00
GRAND TOTAL				217,500.00

* Sleeping quarters will be in MCWS-PAMO

** For Day 0 – CPMU will travel from Sablayan, Occidental Mindoro

BIODIVERSITY CORRIDOR PROJECT



Integrated Approach in Management of Major Biodiversity Corridors of the Philippines

Prepared:

Reviewed:

FOR. JAN LLOYD I. BALON
Regional Landscape Planning Specialist
BD Cor Project

CELSO B. ALMAZAN
SVEMS/In-charge, Technical Services Division
BD Cor Project Focal

Recommending Approval:

DONNA MAYOR-GORDOVE, CESO IV
Assistant Regional Director for Management Services

Approved:

LORMELYN E. CLAUDIO, CESO IV
Regional Executive Director