

Appendix 4

GIS Progress REPORT

Geographic Information Systems (GIS) Database

Mitigating Impact from Aquaculture in the Philippines (PHILMINAQ)

INCO-CT-2006-031640

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PHILMINAQ
Mitigating Impact from
Aquaculture in the
Philippines

**Akvaplan
niva**
Аквалан-нива Баренц



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BUREAU OF FISHERIES AND AQUATIC RESOURCES
FISHERIES INFORMATION MANAGEMENT CENTER



Department of Agriculture
Bureau of Fisheries and Aquatic Resources



PHILMINAQ GIS Database

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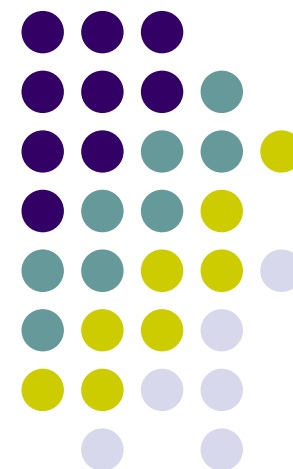
²ICT Specialist, Fisheries Information Management Center (BFAR-FIMC)

³GIS Specialist

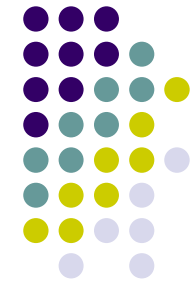
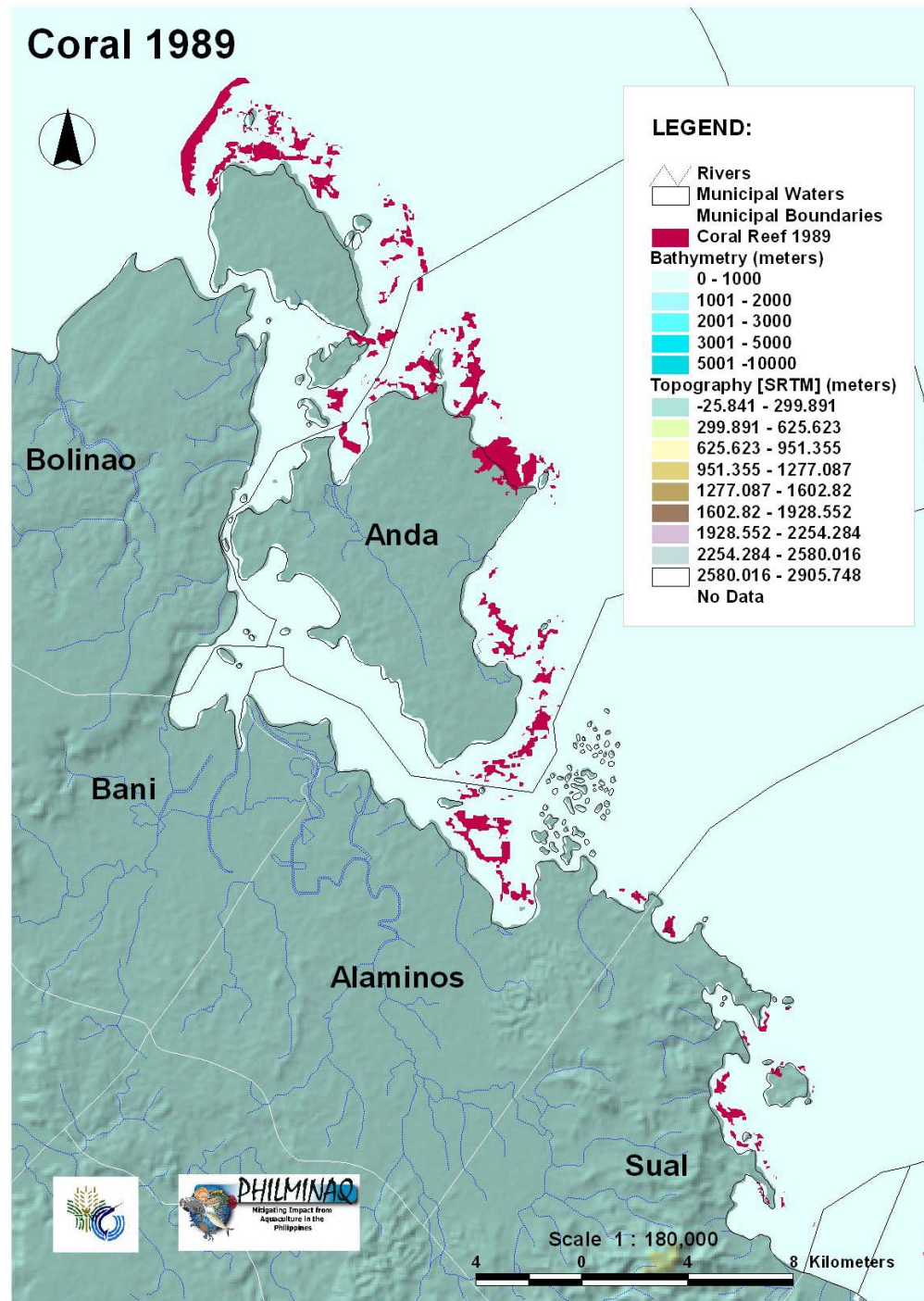
⁴ICT Officer, BFAR-FIMC

⁵ICT Officer, BFAR-FIMC

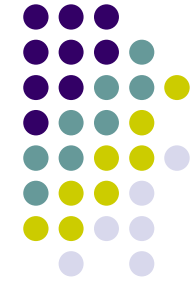
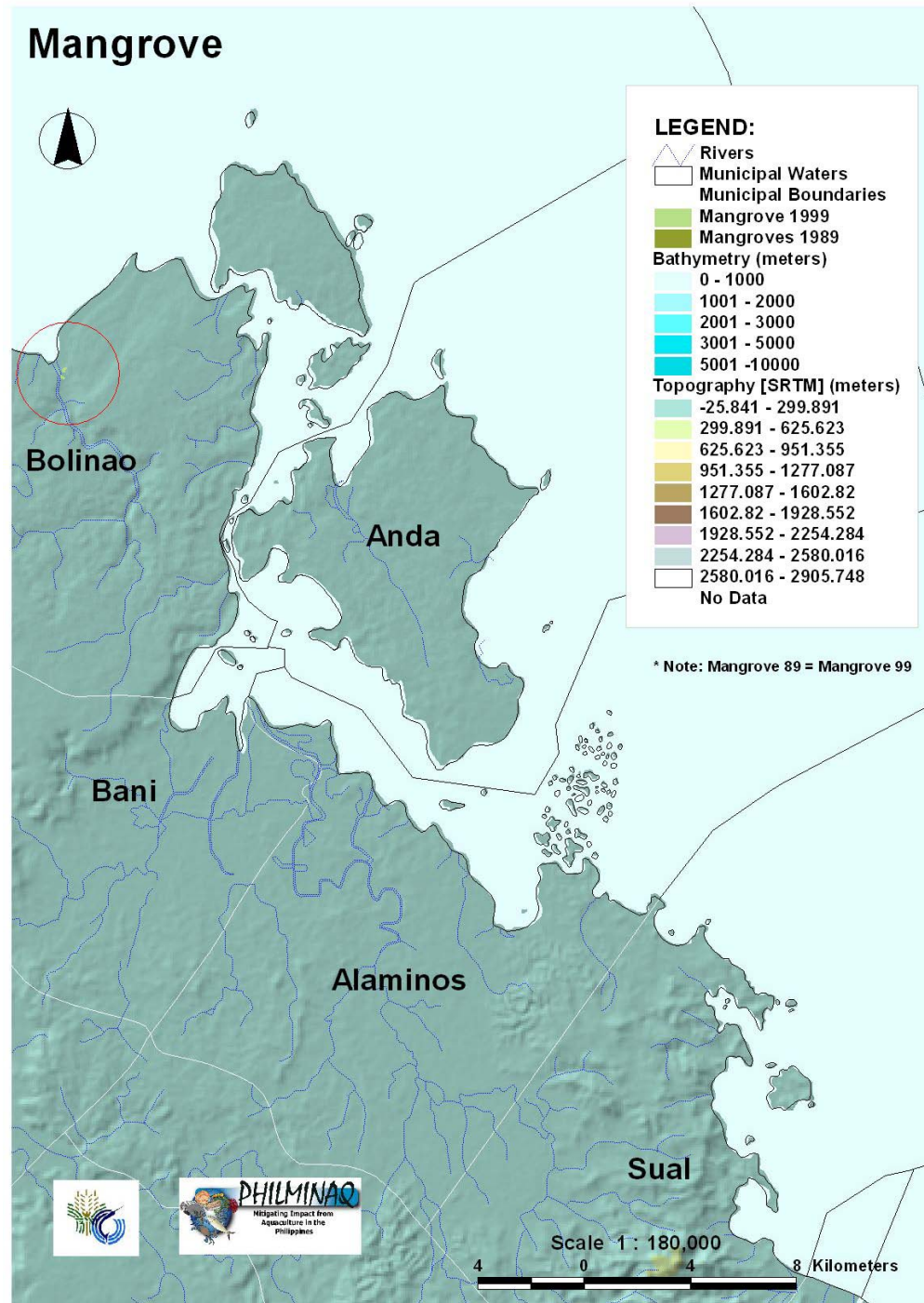
⁶GIS Officer, BFAR-FIMC



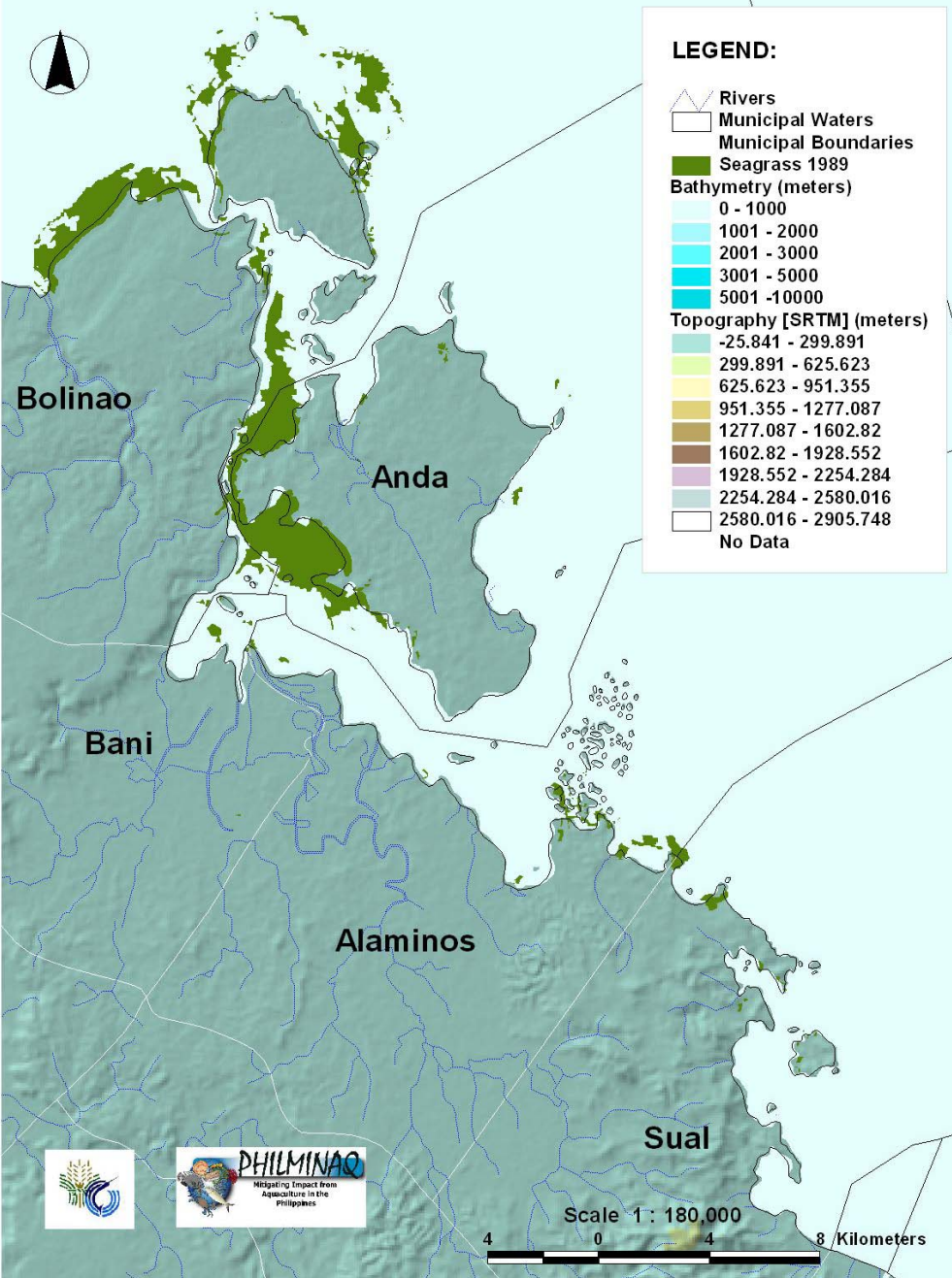
Coral 1989



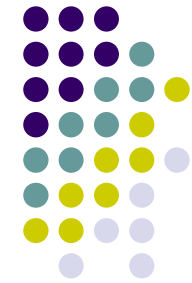
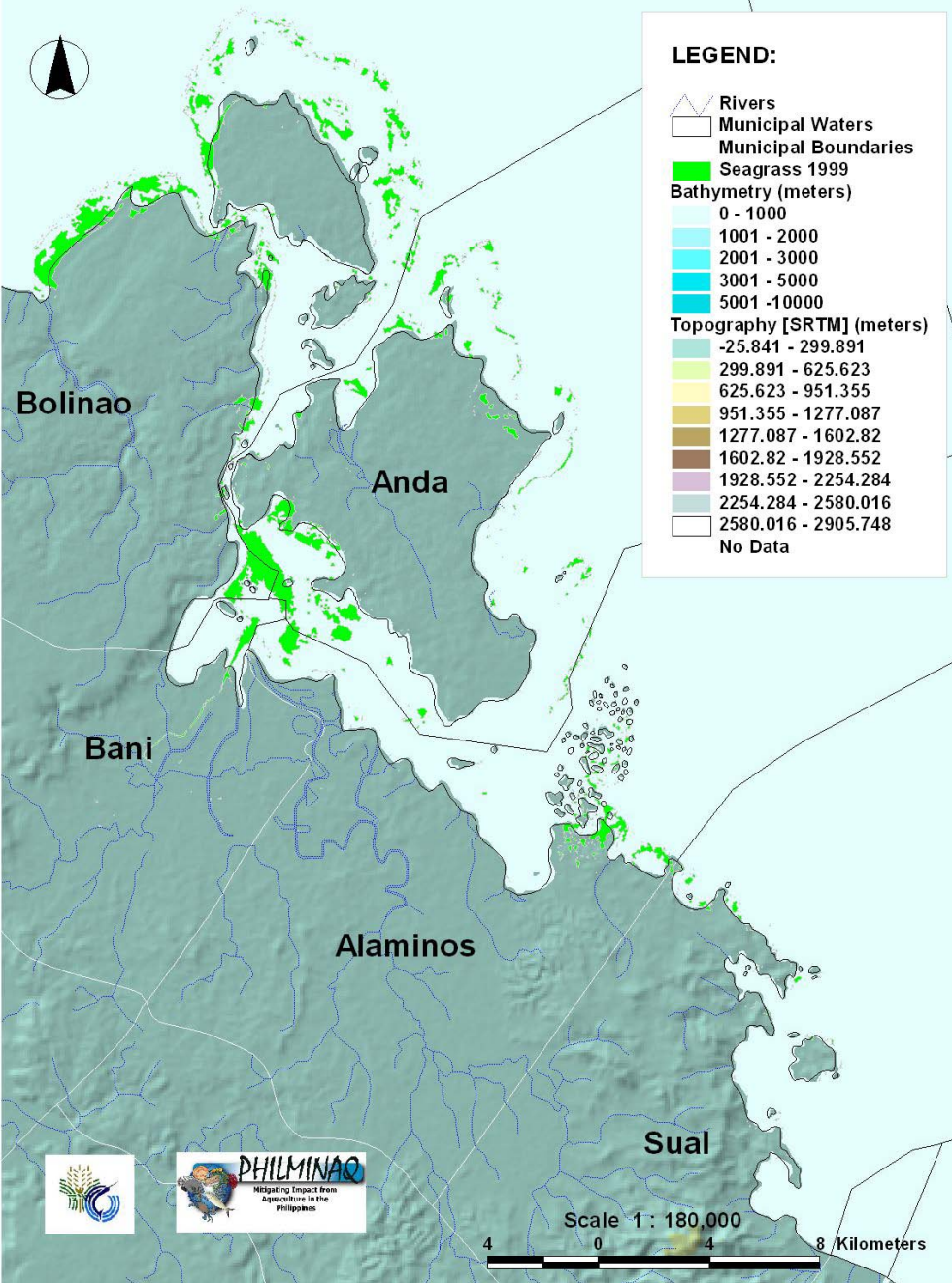
Mangrove



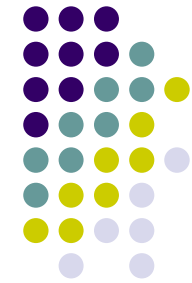
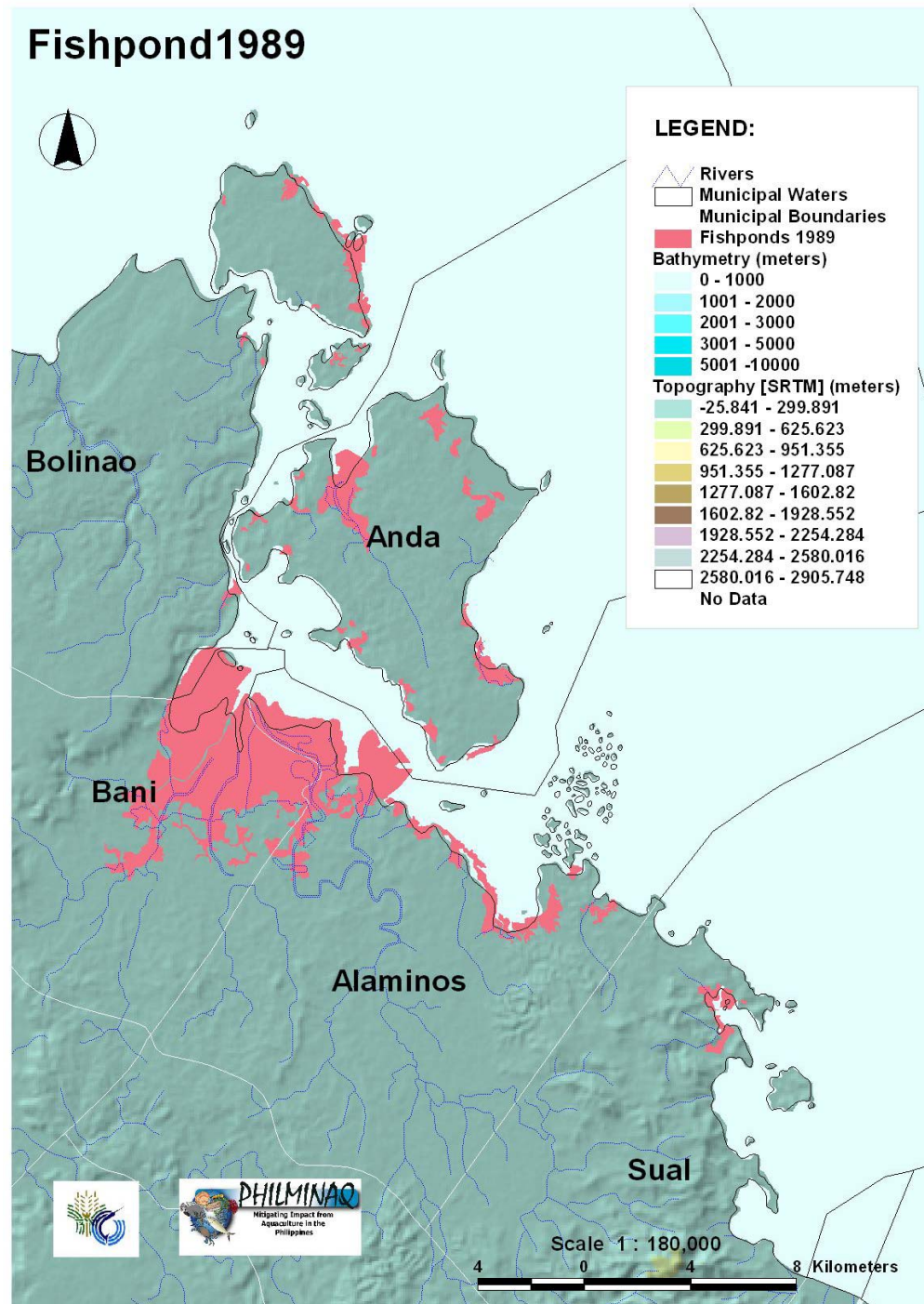
Seagrass 1989



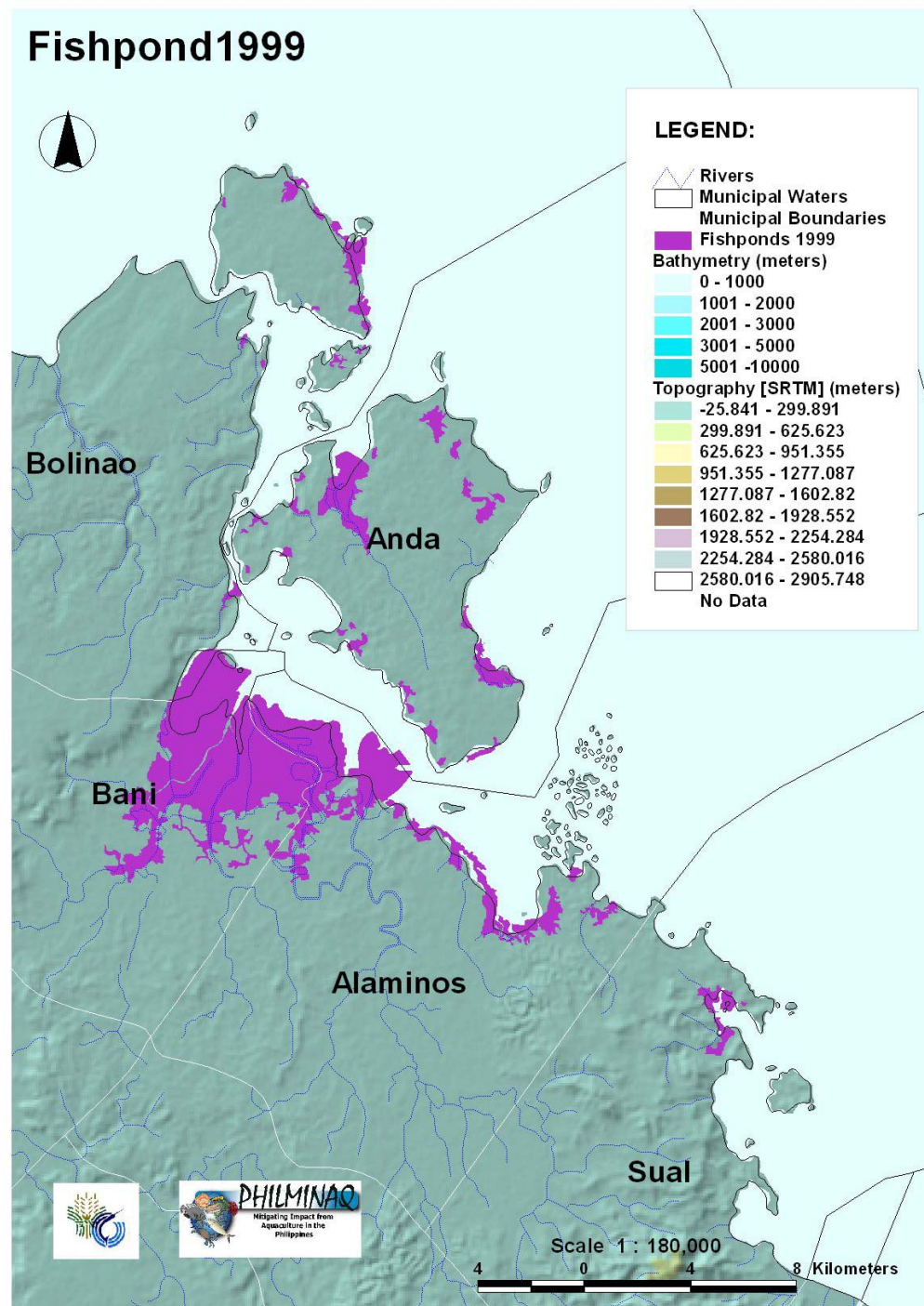
Seagrass 1999



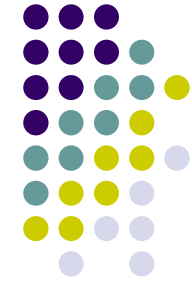
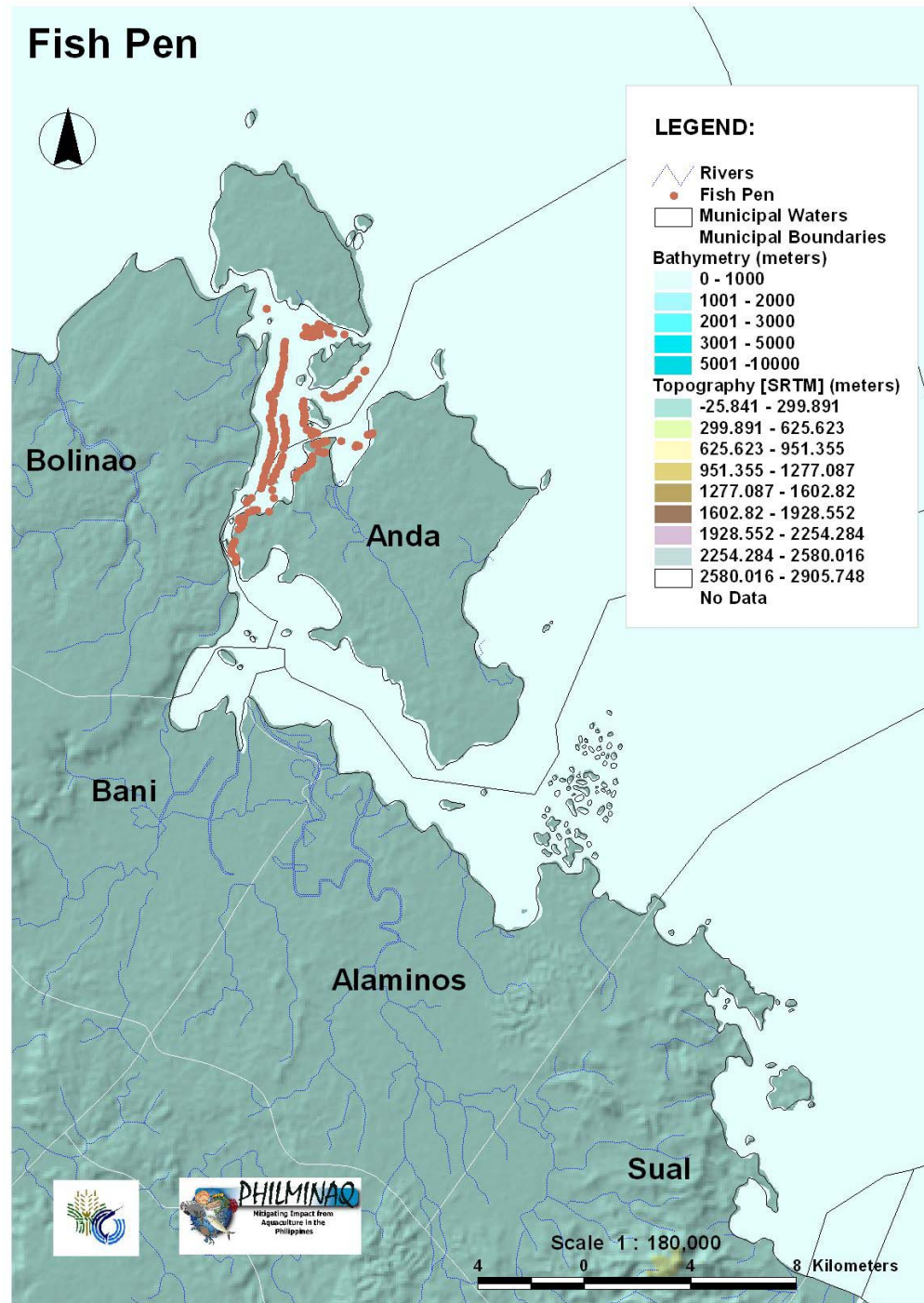
Fishpond1989



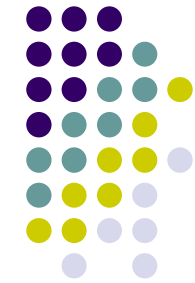
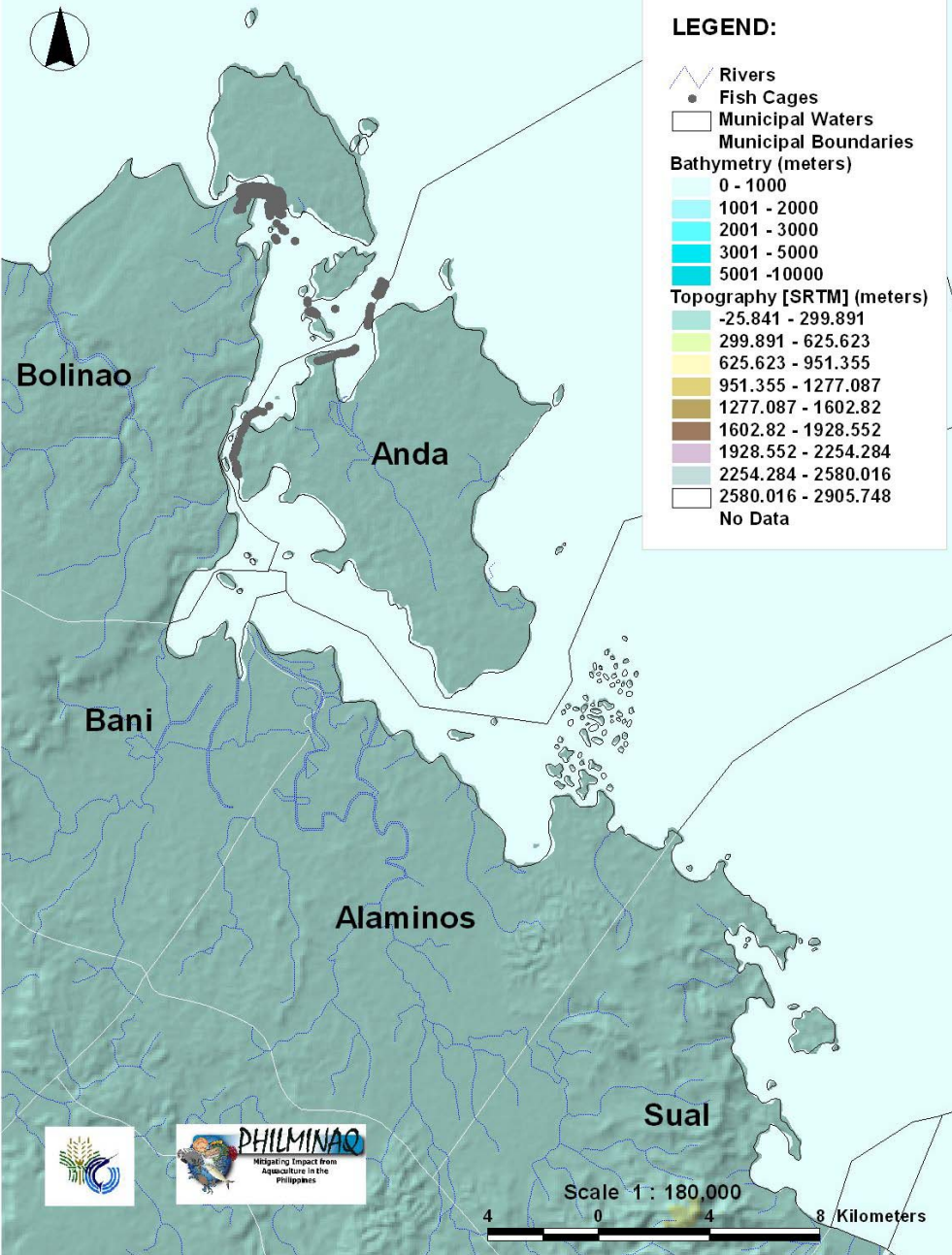
Fishpond1999



Fish Pen



Fish Cage



BFAR Fisheries Information Management Center (BFAR-FIMC)
PHILMINAQ GIS Database
Integrated Fisheries and Aquatic Resources Management Council (IFARMC)

Region	IFARMC	Province	Municipalities	LGUTypeID	BFAR_BMC_ClassID
CAR	Magat Dam	Ifugao	Alfonsolista	1	0
2	Magat Dam	Isabela	Ramon	1	0
2	Magat Dam	Isabela	Cordon	1	0
2	Magat Dam	Nueva Vizcaya	Diadi	1	0
1	Lingayen Gulf	Pangasinan	Bolinao	1	0
1	Lingayen Gulf	Pangasinan	Anda	1	0
1	Lingayen Gulf	Pangasinan	Bani	1	0
1	Lingayen Gulf	Pangasinan	Alaminos	2	0
1	Lingayen Gulf	Pangasinan	Labrador	1	0
1	Lingayen Gulf	Pangasinan	Sual	1	0
1	Lingayen Gulf	Pangasinan	Lingayen	1	0
1	Lingayen Gulf	Pangasinan	Binmaley	1	0
1	Lingayen Gulf	Pangasinan	Dagupan City	2	0
1	Lingayen Gulf	Pangasinan	Mangaldan	1	0
1	Lingayen Gulf	Pangasinan	San Fabian	1	0
1	Lingayen Gulf	La Union	Rosario	1	0
1	Lingayen Gulf	La Union	Sto. Tomas	1	0
1	Lingayen Gulf	La Union	Agoo	1	0
1	Lingayen Gulf	La Union	Aringay	1	0
1	Lingayen Gulf	La Union	Caba	1	0
1	Lingayen Gulf	La Union	Bauang	1	0
1	Lingayen Gulf	La Union	San Fernando City	2	0
1	Paoay Lake	Ilocos Norte	Paoay	1	0
2	Paoay Lake	Isabela	Ramon	1	0
2	Paoay Lake	Isabela	Cordon	1	0
2	Paoay Lake	Nueva Vizcaya	Diadi	1	0
2	Balintang Channel	Batanes	Basco	1	0
2	Balintang Channel	Batanes	Mahatao	1	0
2	Balintang Channel	Batanes	Ivana	1	0
2	Balintang Channel	Batanes	Uyugan	1	0
2	Balintang Channel	Cagayan	Sabtang	1	0
2	Balintang Channel	Cagayan	Itbayat	1	0
3	Subic Bay	Zambales	Olongapo City	2	0
3	Subic Bay	Bataan	Morong	1	0
3	Manila Bay	Bataan	Samal	1	0
3	Manila Bay	Bataan	Orani	1	0
3	Manila Bay	Bataan	Pilar	1	0
3	Manila Bay	Bataan	Hermosa	1	0
3	Manila Bay	Bataan	Abucay	1	0
3	Manila Bay	Bataan	Orion	1	0
3	Manila Bay	Bataan	Balanga	1	0
3	Manila Bay	Bataan	Limay	1	0
3	Manila Bay	Bataan	Mariveles	1	0
3	Manila Bay	Pampanga	Sasmuan	1	0
3	Manila Bay	Pampanga	Masantol	1	0
3	Manila Bay	Pampanga	Macabebe	1	0
3	Manila Bay	Pampanga	Minalin	1	0
3	Manila Bay	Pampanga	Lubao	1	0
3	Manila Bay	Bulacan	Malolos,	1	0
3	Manila Bay	Bulacan	Paombong	1	0

3	Manila Bay	Bulacan	Hagonoy	1	0
3	Manila Bay	Bulacan	Bulacan	1	0
3	Manila Bay	Bulacan	Obando	1	0
4-A	Manila Bay	Cavite	Bacoor	1	0
4-A	Manila Bay	Cavite	Cavite City	2	0
4-A	Manila Bay	Cavite	Kawit	1	0
4-A	Manila Bay	Cavite	Maragondon	1	0
4-A	Manila Bay	Cavite	Naic	1	0
4-A	Manila Bay	Cavite	Noveleta	1	0
4-A	Manila Bay	Cavite	Rosario	1	0
4-A	Manila Bay	Cavite	Tanza	1	0
4-A	Manila Bay	Cavite	Ternate	1	0
4-A	Manila Bay	NCR	Las Piñas	1	0
4-A	Manila Bay	NCR	Malabon	1	0
4-A	Manila Bay	NCR	Manila	2	0
4-A	Manila Bay	NCR	Navotas	2	0
4-A	Manila Bay	NCR	Parañaque	2	0
4-A	Manila Bay	NCR	Pasay	2	0
4-A	Lamon Bay	Quezon	Alabat	1	0
4-A	Lamon Bay	Quezon	Atimonan	1	0
4-A	Lamon Bay	Quezon	Calauag	1	0
4-A	Lamon Bay	Quezon	Gumaca	1	0
4-A	Lamon Bay	Quezon	Infanta,	1	0
4-A	Lamon Bay	Quezon	Jomalig	1	0
4-A	Lamon Bay	Quezon	Lopez	1	0
4-A	Lamon Bay	Quezon	Mauban	1	0
4-A	Lamon Bay	Quezon	Panukulan	1	0
4-A	Lamon Bay	Quezon	Patnanungan	1	0
4-A	Lamon Bay	Quezon	Perez	1	0
4-A	Lamon Bay	Quezon	Plaridel	1	0
4-A	Lamon Bay	Quezon	Polillo	1	0
4-A	Lamon Bay	Quezon	Quezon	1	0
4-A	Lamon Bay	Quezon	Real	1	0
4-A	Tayabas Bay	Quezon	Agdangan	1	0
4-A	Tayabas Bay	Quezon	Catanauan	1	0
4-A	Tayabas Bay	Quezon	Gen. Luna	1	0
4-A	Tayabas Bay	Quezon	Lucena City	2	0
4-A	Tayabas Bay	Quezon	Mulanay	1	0
4-A	Tayabas Bay	Quezon	Padre Burgos	1	0
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4-A	Tayabas Bay	Batangas	San Juan	1	0
4-A	Balayan Bay	Batangas	Balayan	1	0
4-A	Balayan Bay	Batangas	Bauan	1	0
4-A	Balayan Bay	Batangas	Calaca	1	0
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4-A	Balayan Bay	Batangas	Lemery	1	0
4-A	Balayan Bay	Batangas	Mabini	1	0
4-A	Balayan Bay	Batangas	San Luis	1	0
4-A	Balayan Bay	Batangas	Taal	1	0
4-A	Balayan Bay	Batangas	Batangas City	2	0
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4-A	Laguna de Bay	Laguna	Biñan	1	0

4-A	Laguna de Bay	Laguna	San Pedro	1	0
4-A	Laguna de Bay	Laguna	Sta. Rosa	1	0
4-A	Laguna de Bay	Laguna	Bay	1	0
4-A	Laguna de Bay	Laguna	Cabuyao	1	0
4-A	Laguna de Bay	Laguna	Calamba	1	0
4-A	Laguna de Bay	Laguna	Los Baños	1	0
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4-A	Laguna de Bay	Laguna	Sta. Cruz	1	0
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4-A	Laguna de Bay	Laguna	Pakil	1	0
4-A	Laguna de Bay	Laguna	Pangil	1	0
4-A	Laguna de Bay	Laguna	Siniloan	1	0
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4-A	Laguna de Bay	Rizal	Taytay	1	0
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4-A	Laguna de Bay	Rizal	Binangonan	1	0
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4-A	Laguna de Bay	Rizal	Cardona	1	0
4-A	Laguna de Bay	Rizal	Baras	1	0
4-A	Laguna de Bay	Rizal	Tanay	1	0
4-A	Laguna de Bay	Rizal	Pililla	1	0
4-A	Laguna de Bay	Rizal	Jala-jala	1	0
4-A	Seven Lakes	Laguna	San Pablo City	2	0
4-A	Taal Lake	Batangas	Balete	1	0
4-A	Taal Lake	Batangas	Tanauan	1	0
4-A	Taal Lake	Batangas	Talisay	1	0
4-A	Taal Lake	Batangas	Laurel	1	0
4-A	Taal Lake	Batangas	Agoncillo	1	0
4-A	Taal Lake	Batangas	San Nicolas	1	0
4-A	Taal Lake	Batangas	Sta. Teresita	1	0
4-A	Taal Lake	Batangas	Alitagtag	1	0
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4-A	Taal Lake	Batangas	Mataas na Kahoy	1	0
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4-A	Ragay Gulf	Quezon	Tagkawayan	1	0
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4-A	Ragay Gulf	Quezon	San Narciso	1	0
4-A	Ragay Gulf	Quezon	San Andres	1	0
4-B	Honda Bay	Palawan	Puerto Princesa City	2	0
4-B	Puerto Princesa	Palawan	Puerto Princesa City	2	0
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5	San Miguel Bay	Camarines Sur	Calabanga	1	0
5	San Miguel Bay	Camarines Sur	Tinambac	1	0
5	San Miguel Bay	Camarines Sur	Cabusao	1	0
5	San Miguel Bay	Camarines Sur	Siruma	1	0
5	San Miguel Bay	Camarines Sur	Sipocot	1	0
5	San Miguel Bay	Camarines Norte	Mercedes	1	0
5	San Miguel Bay	Camarines Norte	Basud	1	0
5	Sorsogon Bay	Sorsogon	Sorsogon	1	0
5	Sorsogon Bay	Sorsogon	Magallanes	1	0
5	Sorsogon Bay	Sorsogon	Casiguran	1	0

5	Sorsogon Bay	Sorsogon	Castilla	1	0
5	Sorsogon Bay	Sorsogon	Pilar	1	0
5	Sorsogon Bay	Sorsogon	Juban	1	0
5	Lagonoy Gulf	Camarines Sur	Lagonoy	1	0
5	Lagonoy Gulf	Camarines Sur	San Jose	1	0
5	Lagonoy Gulf	Camarines Sur	Presentacion	1	0
5	Lagonoy Gulf	Camarines Sur	Caramoan	1	0
5	Lagonoy Gulf	Camarines Sur	Tingaon	1	0
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5	Lagonoy Gulf	Albay	Tiwi	1	0
5	Lagonoy Gulf	Albay	Tabaco	1	0
5	Lagonoy Gulf	Albay	Bacacay	1	0
5	Lagonoy Gulf	Albay	Rapu-rapu	1	0
5	Lagonoy Gulf	Albay	Malilipot	1	0
5	Lagonoy Gulf	Albay	Malinao	1	0
5	Lagonoy Gulf	Catanduanes	Bato	1	0
5	Lagonoy Gulf	Catanduanes	San Andres	1	0
5	Lagonoy Gulf	Catanduanes	Virac	1	0
5	Ragay Gulf	Camarines Sur	Minalabac	1	0
5	Ragay Gulf	Camarines Sur	Del Gallego	1	0
5	Ragay Gulf	Camarines Sur	Pasacao	1	0
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5	Ragay Gulf	Camarines Sur	San Fernando	1	0
5	Ragay Gulf	Camarines Sur	Balatan	1	0
5	Ragay Gulf	Camarines Sur	Bula	1	0
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5	Ragay Gulf	Camarines Sur	Sipocot	1	0
5	Ragay Gulf	Camarines Sur	Lupi	1	0
5	Ragay Gulf	Camarines Sur	Libmanan	1	0
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6	Guimaras	Guimaras	Buenavista	1	0
6	Guimaras	Guimaras	Nueva	1	0
6	Guimaras	Guimaras	Valencia	1	0
6	Guimaras	Guimaras	San Sibunag	1	0
6	Guimaras	Guimaras	San Lorenzo	1	0
6	Northern Negros Aquatic	Negros Occidental	Cadiz	1	0
6	Northern Negros Aquatic	Negros Occidental	Sagay	1	0
6	Northern Negros Aquatic	Negros Occidental	Victorias	1	0
6	Resources Management	Negros Occidental	Toboso	1	0
6	Resources Management	Negros Occidental	Calatrava	1	0
6	Resources Management	Negros Occidental	Escalante	1	0
6	Advisory Council	Negros Occidental	San Carlos,	1	0
6	Advisory Council	Negros Occidental	Manapla	1	0
6	(NNARMAC)*	Negros Occidental	Don Salvador	1	1
6	Gigantes Island*	Iloilo	Benedicto	1	1
6	Carles				
6	Northern Iloilo Alliance for Coastal Development (NIACDEV)*	Iloilo	Ajuy	1	1

6	Northern Iloilo Alliance for Coastal Development (NIACDEV)*	Iloilo	San Dionisio	1	1
6	Northern Iloilo Alliance for Coastal Development (NIACDEV)*	Iloilo	Concepcion	1	1
6	Northern Iloilo Alliance for Coastal Development (NIACDEV)*	Iloilo	Estancia	1	1
6	Northern Iloilo Alliance for Coastal Development (NIACDEV)*	Iloilo	Batad	1	1
6	Northern Iloilo Alliance for Coastal Development (NIACDEV)*	Iloilo	Balasan	1	1
6	Northern Iloilo Alliance for Coastal Development (NIACDEV)*	Iloilo	Lemery	1	1
6	Northern Iloilo Alliance for Coastal Development (NIACDEV)*	Iloilo	Carles	1	1
6	LIPASECU Management Council*	Antique	Libertad	1	1
6	LIPASECU Management Council*	Antique	Pandan	1	1
6	LIPASECU Management Council*	Antique	Sebaste	1	1
6	LIPASECU Management Council*	Antique	Culasi	1	1
6	Batan Bay Management Council*	Antique	Batan	1	1
6	Batan Bay Management Council*	Antique	Altavas	1	1
6	Batan Bay Management Council*	Antique	New Washington	1	1
6	Banate Bay Resources Management Council*	Iloilo	Banate	1	1
6	Banate Bay Resources Management Council*	Iloilo	Anilao	1	1
6	Banate Bay Resources Management Council*	Iloilo	Barotac Nuevo	1	1
6	KAHIL-ICAMCI*	Negros Occidental	Kabankalan	1	1
6	KAHIL-ICAMCI*	Negros Occidental	Himamaylan	1	1
6	KAHIL-ICAMCI*	Negros Occidental	Ilog	1	1
6	COAST HAVEN	Antique	Aniniy	1	0

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6	COAST HAVEN	Antique	Tobias	1	0
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7	Cogtong Bay	Bohol	Candijay	1	0
7	Cogtong Bay	Bohol	Anda	1	0
7	Cogtong Bay	Bohol	Mabini	1	0
7	Maribojoc Bay	Bohol	Candijay	1	0
7	Maribojoc Bay	Bohol	Anda	1	0
7	Maribojoc Bay	Bohol	Mabini	1	0
8	Carigara Bay	Leyte	Carigara	1	0
8	Carigara Bay	Leyte	Capoocan	1	0
8	Carigara Bay	Leyte	Leyte	1	0
8	Carigara Bay	Leyte	Barugo	1	0
8	Carigara Bay	Leyte	Albuera	1	0
8	Carigara Bay	Leyte	San Miguel	1	0
8	Carigara Bay	Leyte	Babatngon	1	0
9	Panguil Bay	Zamboanga Del Sur	Aurora	1	0
9	Panguil Bay	Zamboanga Del Sur	Tambulig	1	0
9	Illana Bay	Zamboanga Del Sur	Tukuran	1	0
9	Illana Bay	Zamboanga Del Sur	Labangan	1	0
9	Illana Bay	Zamboanga Del Sur	Pagadian City	2	0
9	Illana Bay	Zamboanga Del Sur	Dumalinao	1	0
9	Illana Bay	Zamboanga Del Sur	San Pablo	1	0
9	Illana Bay	Zamboanga Del Sur	Dinas,	1	0
9	Illana Bay	Zamboanga Del Sur	Dimataling	1	0
9	Illana Bay	Zamboanga Del Sur	Tabina	1	0
9	Dumaquilas Bay	Zamboanga del Sur	Margosatubig	1	0
9	Dumaquilas Bay	Zamboanga del Sur	Lapuyan	1	0
9	Dumaquilas Bay	Zamboanga del Sur	Kumalarang	1	0
9	Dumaquilas Bay	Zamboanga del Sur	Buug	1	0
9	Dumaquilas Bay	Zamboanga del Sur	Malangas	1	0
9	Sibugay Bay	Zamboanga del Sur	Alicia	1	0
9	Sibugay Bay	Zamboanga del Sur	Talusan	1	0
9	Sibugay Bay	Zamboanga del Sur	Mabuhay	1	0
9	Sibugay Bay	Zamboanga del Sur	Subanipa	1	0
9	Sibugay Bay	Zamboanga del Sur	Payao	1	0
9	Sibugay Bay	Zamboanga del Sur	Siay	1	0
9	Sibugay Bay	Zamboanga del Sur	Naga	1	0

		Sur			
9	Sibugay Bay	Zamboanga del Sur	Kabasalan	1	0
9	Sibugay Bay	Zamboanga del Sur	Ipil	1	0
9	Sibugay Bay	Zamboanga del Sur	R.T Lim	1	0
9	Sibugay Bay	Zamboanga del Sur	Tungawan	1	0
9	Murciellagus Bay	Zamboanga del Norte	Sibutad	1	0
9	Murciellagus Bay	Zamboanga del Norte	Rizal	1	0
9	North IFARMC	Zamboanga del Norte	Dapitan City	2	0
9	North IFARMC	Zamboanga del Norte	Dipolog City	2	0
9	North IFARMC	Zamboanga del Norte	Katipunan	1	0
9	North IFARMC	Zamboanga del Norte	Roxas	1	0
9	North IFARMC	Zamboanga del Norte	Manukan	1	0
9	North IFARMC	Zamboanga del Norte	Jose Dalman	1	0
9	South IFARMC	Zamboanga del Norte	Sindangan	1	0
9	South IFARMC	Zamboanga del Norte	Leon Postigo	1	0
9	South IFARMC	Zamboanga del Norte	Salug	1	0
9	South IFARMC	Zamboanga del Norte	Liloy	1	0
9	South IFARMC	Zamboanga del Norte	Labason	1	0
9	South IFARMC	Zamboanga del Norte	Gutalac	1	0
9	South IFARMC	Zamboanga del Norte	Baliguian	1	0
9	South IFARMC	Zamboanga del Norte	Sirawai	1	0
9	South IFARMC	Zamboanga del Norte	Panabutan	1	0
9	South IFARMC	Zamboanga del Norte	Sibuco	1	0
10	Gingoog Bay	Misamis Oriental	Balingoan	1	0
10	Gingoog Bay	Misamis Oriental	Talisayan	1	0
10	Gingoog Bay	Misamis Oriental	Medina	1	0
10	Gingoog Bay	Misamis Oriental	Gingoog City	2	0
10	Gingoog Bay	Misamis Oriental	Magsaysay	1	0
10	Iligan	Lanao del Norte	Linamon	1	0
10	Iligan	Lanao del Norte	Kauswagan	1	0
10	Iligan	Lanao del Norte	Bacolod	1	0
10	Iligan	Lanao del Norte	Iligan City	2	0
10	Panguil Bay	Lanao del Norte	Part of Maigo	1	0
10	Panguil Bay	Lanao del Norte	Kolambugan	1	0
10	Panguil Bay	Lanao del Norte	Tubod	1	0
10	Panguil Bay	Lanao del Norte	Lala	1	0
10	Panguil Bay	Lanao del Norte	Kapatagan	1	0
10	Panguil Bay	Lanao del Norte	Baroy	1	0

11	Malalag Bay	Davao del Sur	Padada	1	0
11	Malalag Bay	Davao del Sur	Sulop	1	0
11	Malalag Bay	Davao del Sur	Malalag	1	0
11	Malalag Bay	Davao del Sur	part of Sta. Maria	1	0
12	Lake Sebu	South Cotabato	Lake Sebu	1	0
12	Sarangani Bay	South Cotabato	Sarangani	1	0
CARAGA	Butuan	Agusan del Norte	Carmen	1	0
CARAGA	Butuan	Agusan del Norte	Nasipit	1	0
CARAGA	Butuan	Agusan del Norte	Buenavista	1	0
CARAGA	Butuan	Agusan del Sur	Butuan City	2	0
CARAGA	Butuan	Agusan del Sur	Magallanes	1	0
CARAGA	Butuan	Agusan del Sur	Cabadbaran	1	0
CARAGA	Butuan	Agusan del Sur	Tubay	1	0
CARAGA	Butuan	Agusan del Sur	Jabonga	1	0
CARAGA	Butuan	Surigao del Norte	Malimono	1	0
CARAGA	Lanuza Bay	Surigao del Sur	Carrascal	1	0
CARAGA	Lanuza Bay	Surigao del Sur	Cantilan	1	0
CARAGA	Lanuza Bay	Surigao del Sur	Madrid	1	0
CARAGA	Lanuza Bay	Surigao del Sur	Lanuza	1	0
CARAGA	Lianga Bay	Surigao del Sur	Marihatag	1	0
CARAGA	Lianga Bay	Surigao del Sur	San Agustin	1	0
CARAGA	Lianga Bay	Surigao del Sur	Lianga	1	0
CARAGA	Lianga Bay	Surigao del Sur	Barobo	1	0
CARAGA	Lake Mainit	Agusan del Norte	Santiago	1	0
CARAGA	Lake Mainit	Agusan del Norte	Jabonga	1	0
CARAGA	Lake Mainit	Agusan del Norte	Alegria	1	0
CARAGA	Lake Mainit	Agusan del Norte	Mainit	1	0
ARMM	Lake Buluan	Maguindanao	Buluan	1	0

ESTABLISHED MARICULTURE ZONES AND PARKS (As of August 8, 2007)



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 MARICULTURE ZONES / PARKS
 PHILIPPINE BASEMAP

Marine Protected areas in the Philippines

Geographic Information Systems (GIS) Database

Mitigating Impact from Aquaculture in the Philippines (PHILMINAQ)

INCO-CT-2006-031640

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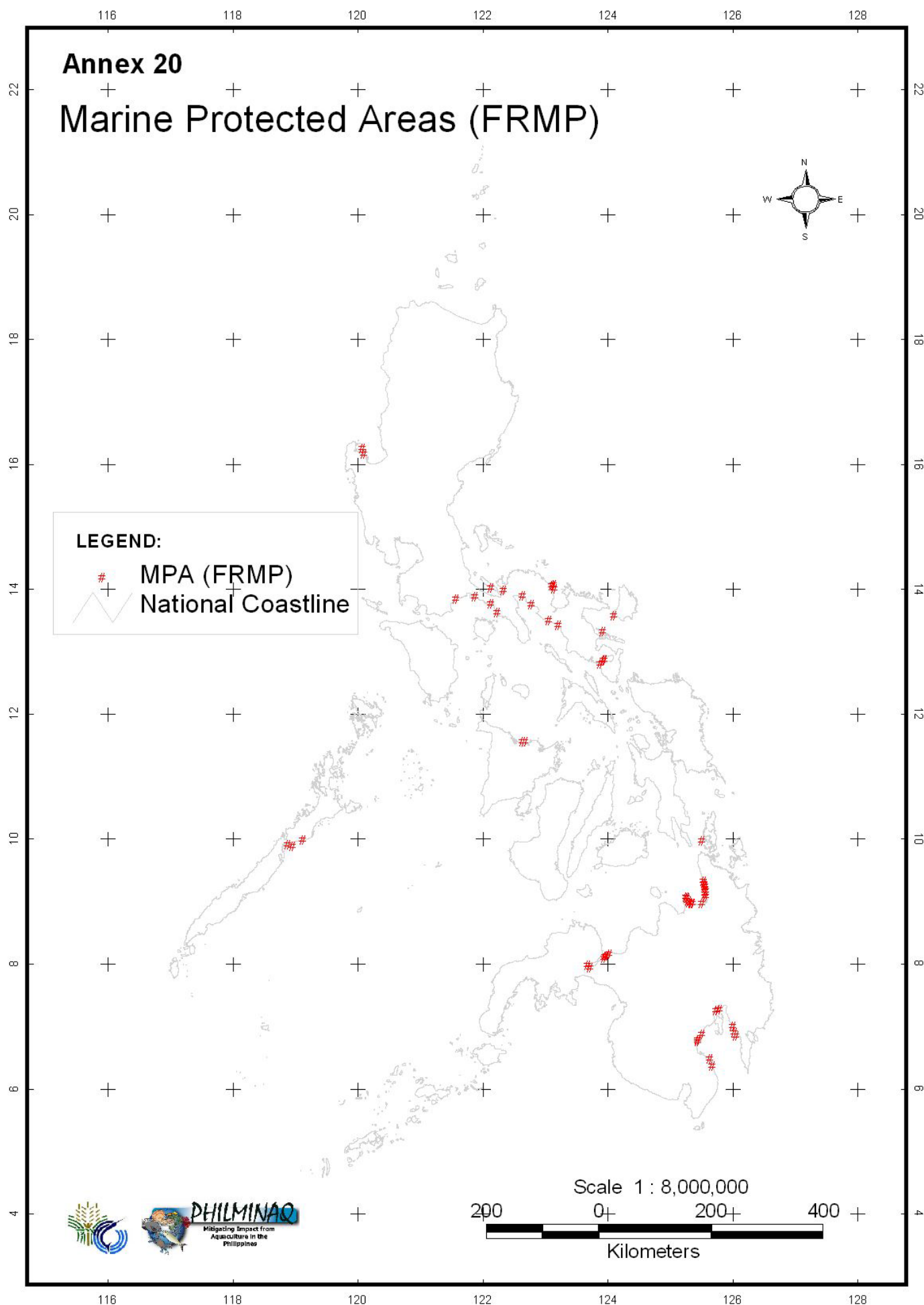
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Philippines Aquaculture Production FY2006

Marine Protected Area

Fish Sanctuaries under the Fisheries Resource Management Project

Longitude	Latitude	Bay	Province	Municipality	Barangay
120.0281	16.2706	Lingayen Gulf	La Union	Agoo	Macalaeng
120.0536	16.1831	Lingayen Gulf	Pangasinan	Anda	Bolo
120.0506	16.1817	Lingayen Gulf	Pangasinan	Alaminos	Telbang
118.8342	9.9336	Honda Bay	Palawan	Puerto Princesa	Manalo
119.0736	10.0111	Honda Bay	Palawan	Puerto Princesa	Binduyan
118.91	9.9097	Honda Bay	Palawan	Puerto Princesa	Babuyan
122.2939	14.0042	Calauag Bay	Quezon	Calauag	
122.1889	13.6472	Tayabas Bay	Quezon	General Luna	
121.8372	13.9019	Tayabas Bay	Quezon	Padre Burgos	Danlagan
122.0858	13.7836	Tayabas Bay	Quezon	Pitogo	
121.5222	13.8631	Tayabas Bay	Quezon	Sariaya	
122.6	13.9136	Ragay Gulf	Camarines Sur	Del Gallego	
123.0144	13.5172	Ragay Gulf	Camarines Sur	Pasacao	Caranan
122.7328	13.7753	Ragay Gulf	Camarines Sur	Ragay	Tarusan Gate
123.0839	14.0947	San Miguel Bay	Camarines Norte	Mercedes	Apua
123.0669	14.0839	San Miguel Bay	Camarines Norte	Mercedes	Quinapaguian
123.1042	14.0339	San Miguel Bay	Camarines Norte	Mercedes	Caringo
122.59	11.58	Sapian Bay	Aklan	Batan	Mambuquiao
122.6353	11.575	Sapian Bay	Capiz	Ivisan	
123.6342	7.9978	Panguil Bay	Zamboanga del Sur	Tambulig	Sumalig
125.7403	7.295	Davao Gulf	Davao del Norte	Carmen	La Paz
125.9575	7.0222	Davao Gulf	Davao Oriental	Banay-banay	Maputi
125.9817	6.9197	Davao Gulf	Davao Oriental	Lupon	Bagong Bayan
126.0033	6.8686	Davao Gulf	Davao Oriental	Lupon	Ilangay
123.6711	7.9636	Panguil Bay	Lanao del Norte	Kapatagan	Tamala
123.9006	8.12	Panguil Bay	Lanao del Norte	Kolambugan	Riverside
123.9175	8.1431	Panguil Bay	Lanao del Norte	Maigo	Kulasihan
123.9725	8.1742	Panguil Bay	Lanao del Norte	Maigo	Liangnan
123.9344	8.1556	Panguil Bay	Lanao del Norte	Maigo	Segapod Pontoron
125.4567	8.9917	Butuan Bay	Agusan del Norte	Buenavista	Manapa
125.4583	9.9914	Butuan Bay	Agusan del Norte	Butuan City	Masao
125.5267	9.1056	Butuan Bay	Agusan del Norte	Cabadbaran	Calibunan
125.2442	9.0281	Butuan Bay	Agusan del Norte	Carmen	Cahayagan
125.2214	9.0831	Butuan Bay	Agusan del Norte	Carmen	Gosoon
125.2928	8.9936	Butuan Bay	Agusan del Norte	Carmen	Poblacion
125.2633	9.0064	Butuan Bay	Agusan del Norte	Carmen	Tagcatong
125.2122	9.0939	Butuan Bay	Agusan del Norte	Carmen	Vinapor
125.3133	8.9933	Butuan Bay	Agusan del Norte	Nasipit	Aclam
125.5231	9.1992	Butuan Bay	Agusan del Norte	Tubay	Binuwangan
125.5175	9.1433	Butuan Bay	Agusan del Norte	Tubay	Cabayawa
125.4986	9.3044	Butuan Bay	Agusan del Norte	Tubay	Lawigan
125.5147	9.2344	Butuan Bay	Agusan del Norte	Tubay	Tagpangahoy
125.5069	9.2714	Butuan Bay	Agusan del Norte	Tubay	Tinigbasan
124.0514	13.6014	Lagonoy Gulf	Catanduanes	San Andres	Agojo
123.8764	13.35	Lagonoy Gulf	Albay	Bacacay	Uson
123.8908	12.8808	Sorsogon Bay	Sorsogon	Juban	Sablayan
123.17	13.4472	Ragay Gulf	Camarines Sur	Minalabac	Oroc-osoc
125.5881	6.5025	Davao Gulf	Davao del Sur	Malita	Tubalan Cove
122.0864	14.0408	Calauag Bay	Quezon	Quezon	

125.4017	6.7808	Davao Gulf	Davao del Sur	Sta. Cruz	Bato
125.3931	6.8017	Davao Gulf	Davao del Sur	Sta. Cruz	Tagabuli
125.6914	7.2761	Davao Gulf	Davao del Norte	Panabo	Cagangohan
125.6233	6.3822	Davao Gulf	Davao del Sur	Malita	New Argao
125.4667	6.9017	Davao Gulf	Davao del Sur	Sta. Cruz	Astorga
125.5286	9.1875	Butuan Bay	Agusan del Norte	Tubay	La Fraternidad
125.315	8.9933	Butuan Bay	Agusan del Norte	Nasipit	Amontay
125.4833	9.345	Butuan Bay	Agusan del Norte	Jabonga	Magdagooc
123.8986	12.8931	Sorsogon Bay	Sorsogon	Juban	
123.8331	12.8283	Sorsogon Bay	Sorsogon	Magallanes	Biga

**Marine Protected Area
Fish Sanctuaries under the HARIBON Project**

Corner	Longitude	Latitude	Bay	Province	Municipality	Barangay	Area
1	119.8782	16.39781	Arnedo Marine Sanctuary	Pangasinan	Bolinao	Arnedo	19 ha.
2	119.8759	16.39802					
3	119.875	16.39434					
4	119.8754	16.39319					
1	119.8464	16.36652	Balingasay Marine Sanctuary	Pangasinan	Bolinao	Balingasay	14.8 ha.
2	119.8435	16.36975					
3	119.8457	16.37175					
4	119.8472	16.37202					
1	120.0107	16.34928	Cabungan Fish Sanctuary	Pangasinan	Anda	Cabungan	18 ha.
2	120.0134	16.34961					
3	120.013	16.34547					
4	120.0086	16.34392					
5	120.009	16.34792					
1	119.9934	16.37935	Carot Fish Sanctuary	Pangasinan	Anda	Carot	13.30 ha.
2	119.9948	16.37425					
3	119.9983	16.37817					
4	119.999	16.38323					

Major rivers and lakes in the Philippines

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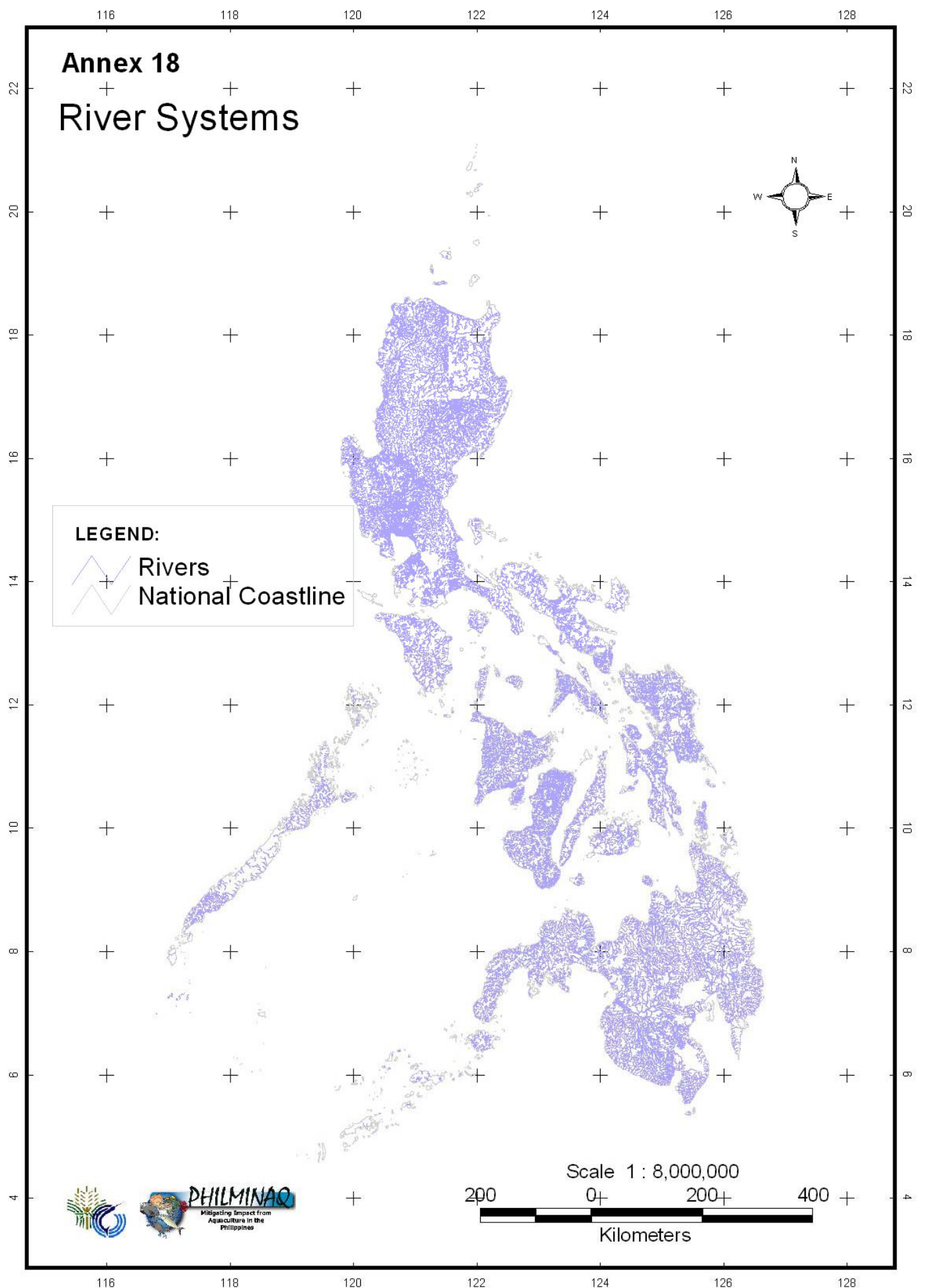
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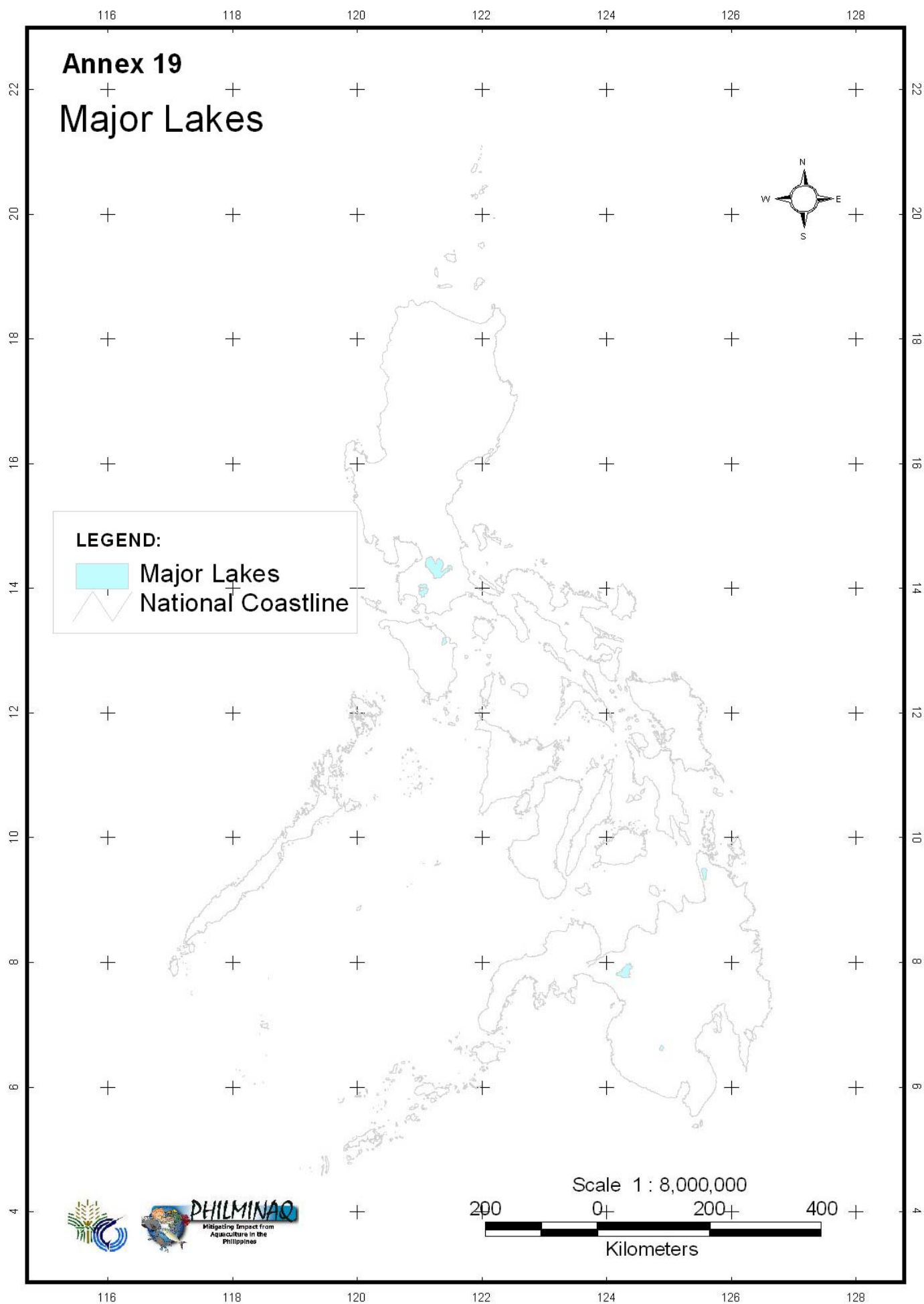
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Philippines Major Lakes¹

Lake	Location	Area (ha)
Laguna de Bay	Laguna and Rizal	89,076
Lake Lanao	Lanao del Sur	34,000
Taal Lake	Batangas	24,356
Lake Mainit	Surigao del Norte-Agusan	17,430
Naujan Lake	Oriental Mindoro	7,899
Lake Buluan	South Cotabato	6,134
Lake Bato	Camarines Sur	3,792
Lake Pagusi	Agusan	2,534
Lake Labas	South Cotabato	2,141
Lake Lumao	Agusan	168

¹ <http://www.fao.org/DOCREP/003/W6928E/w6928e0o.htm>

Regional coastlines

Geographic Information Systems (GIS) Database

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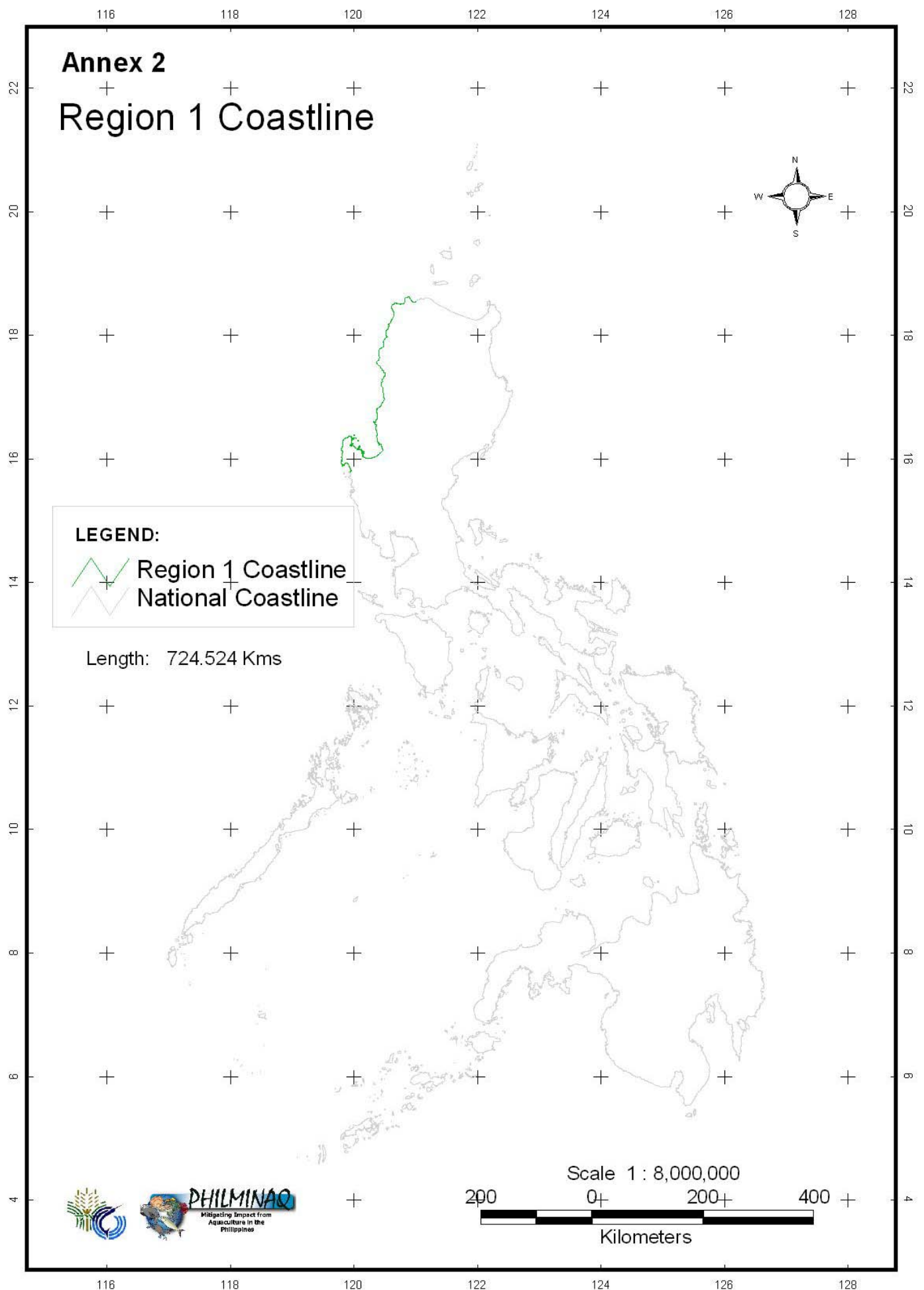
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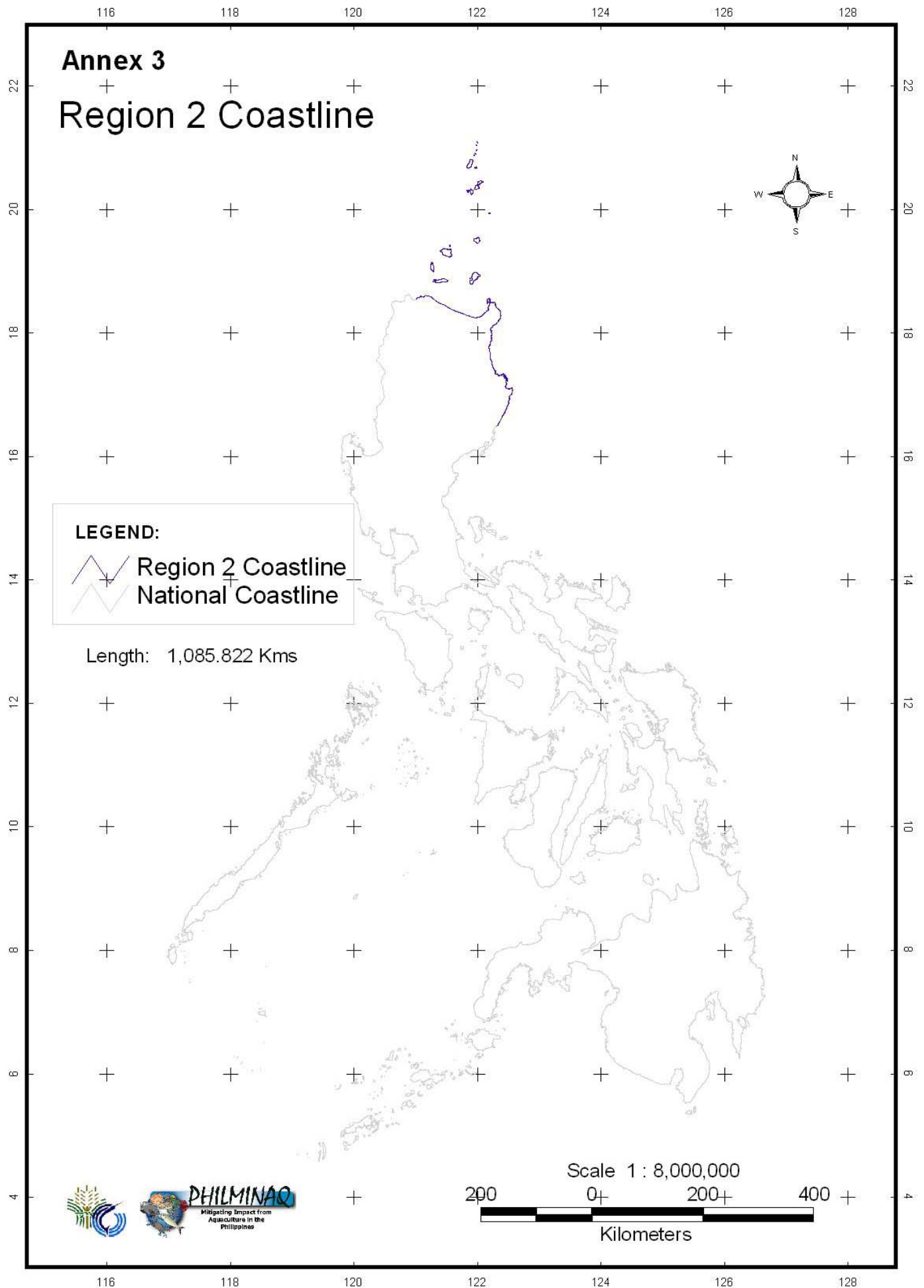
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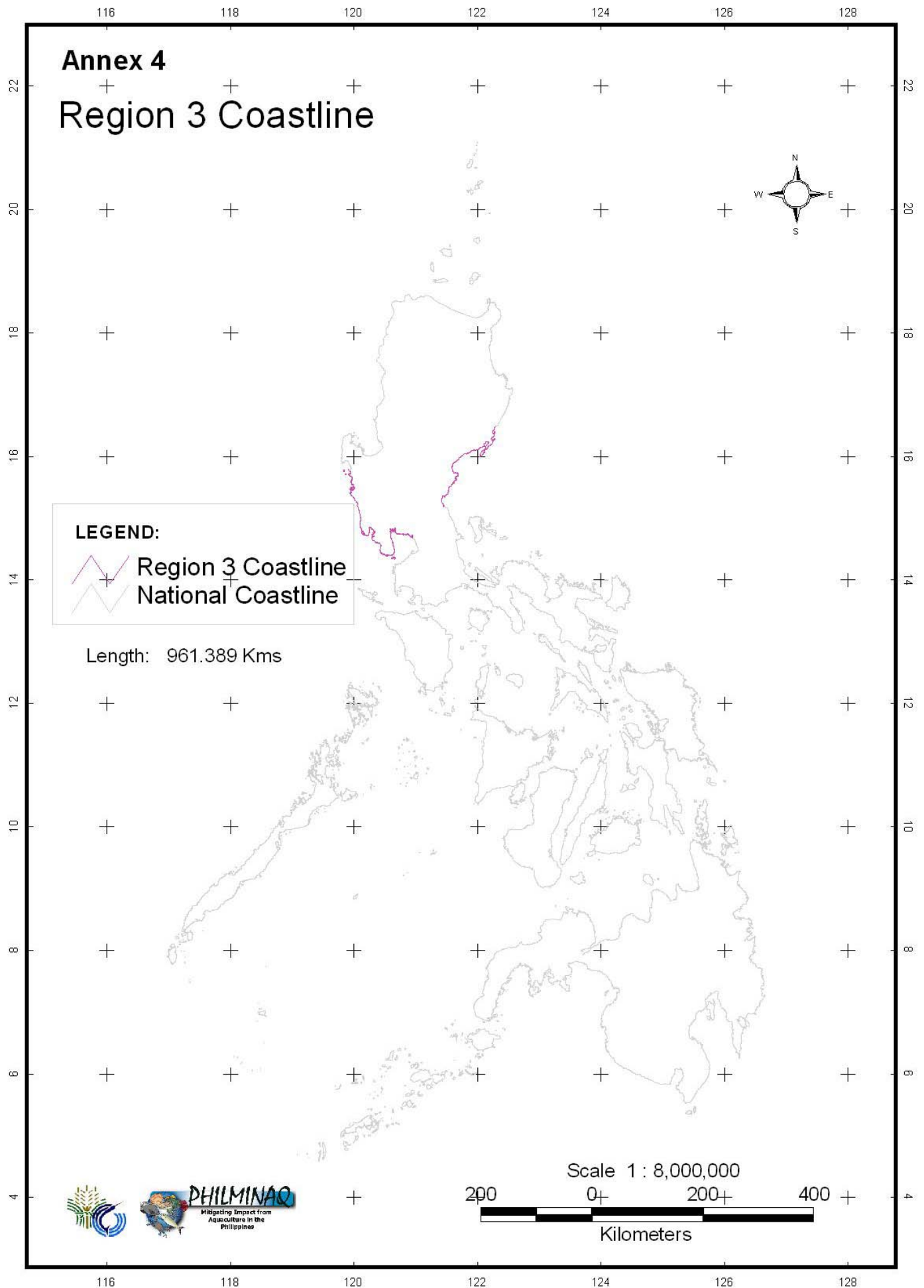


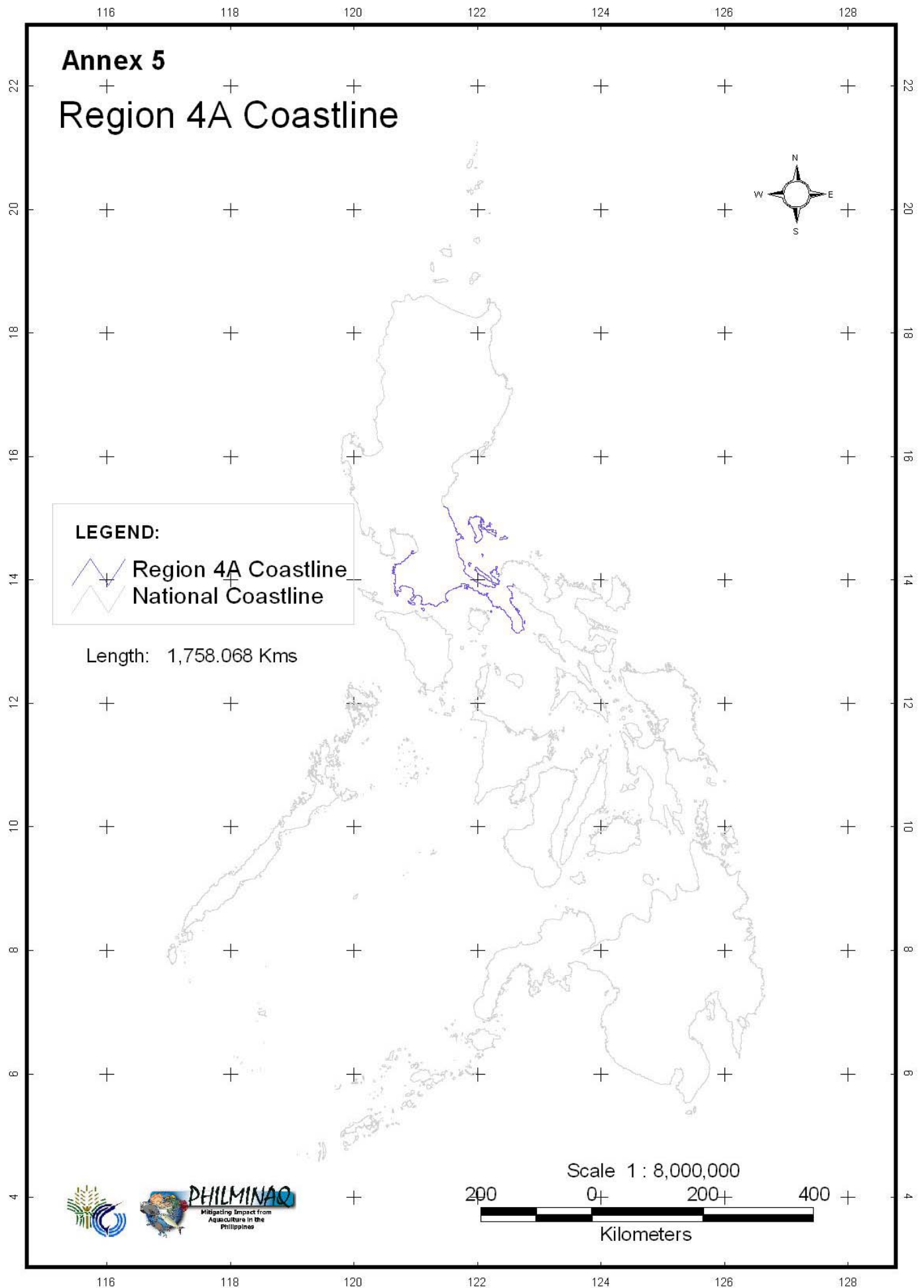
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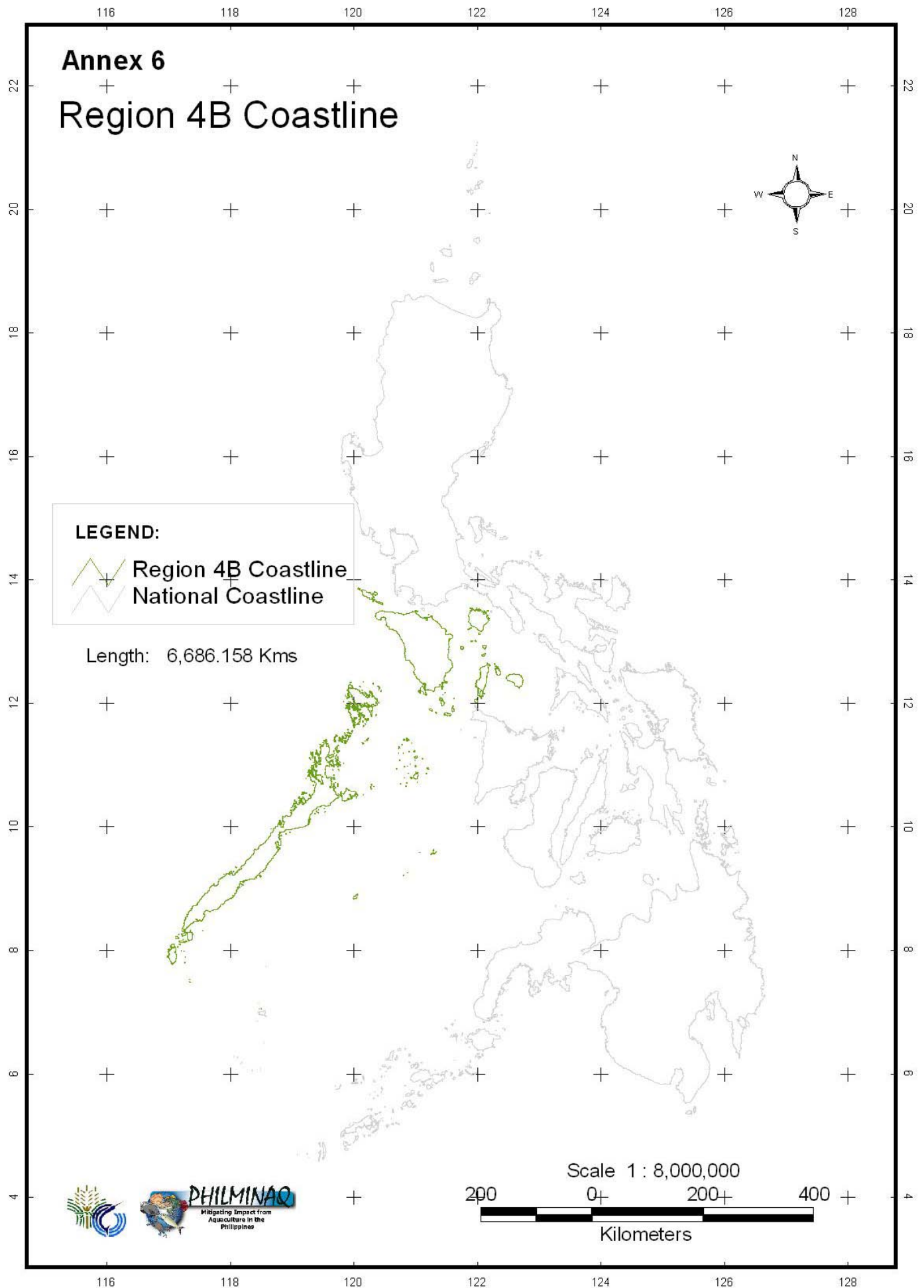
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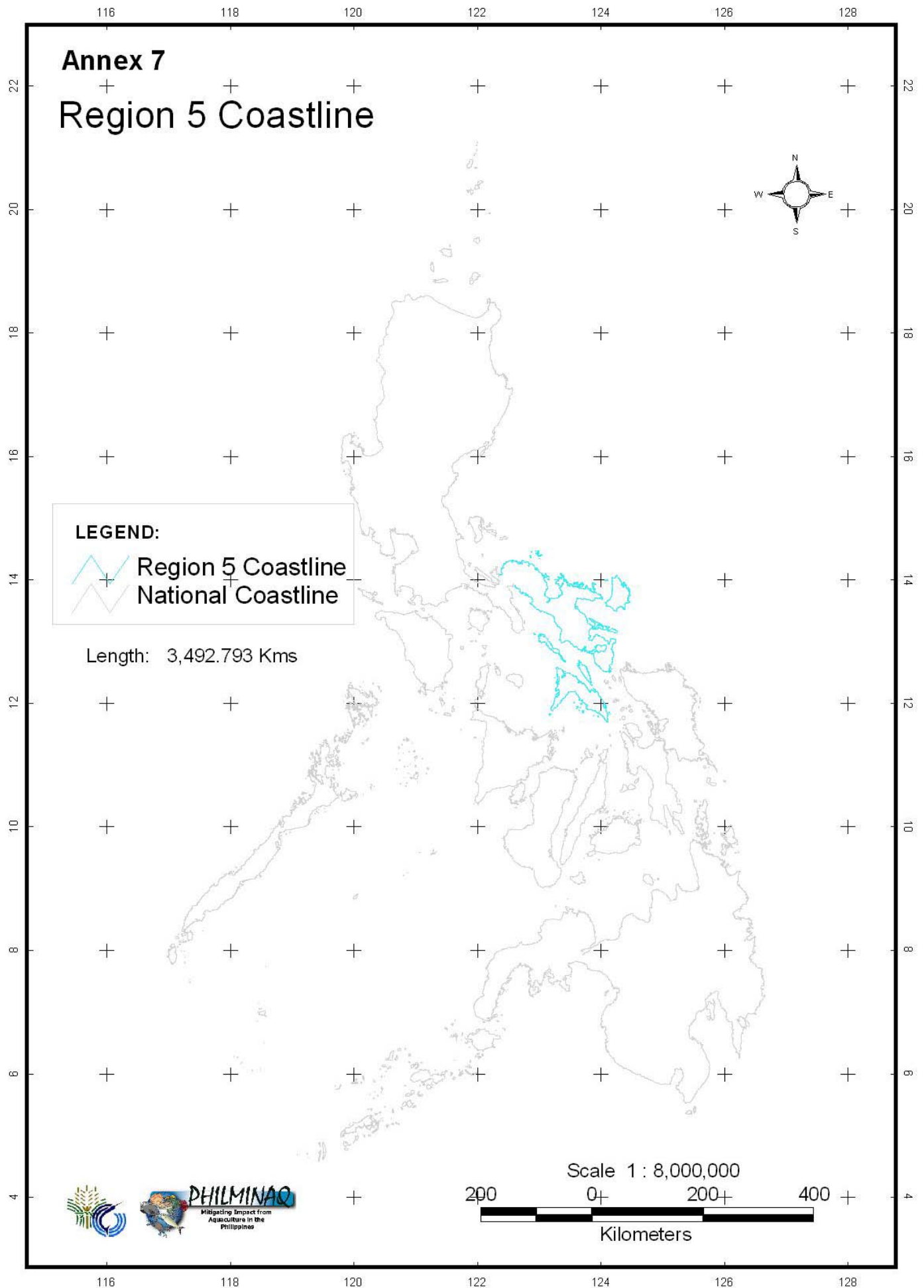


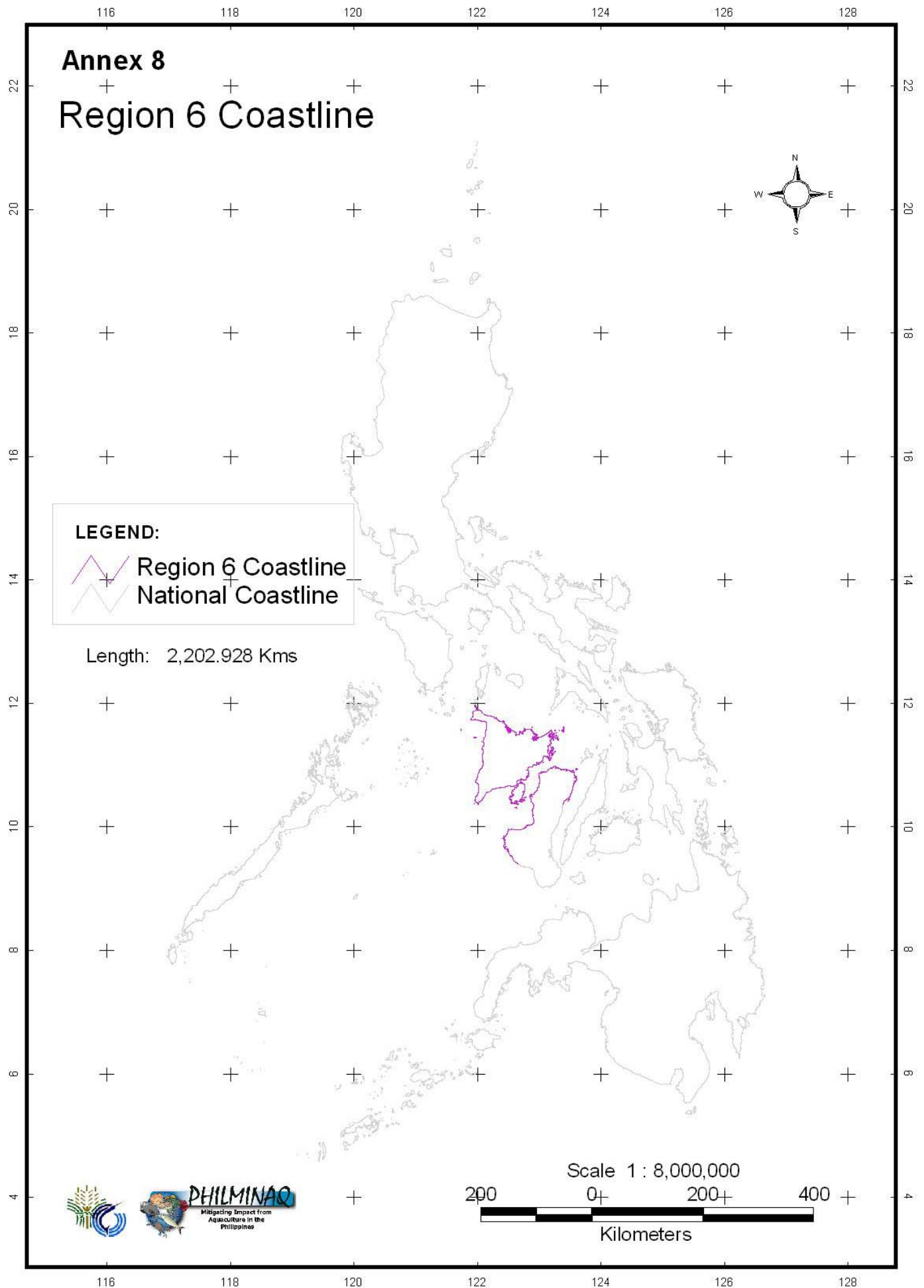


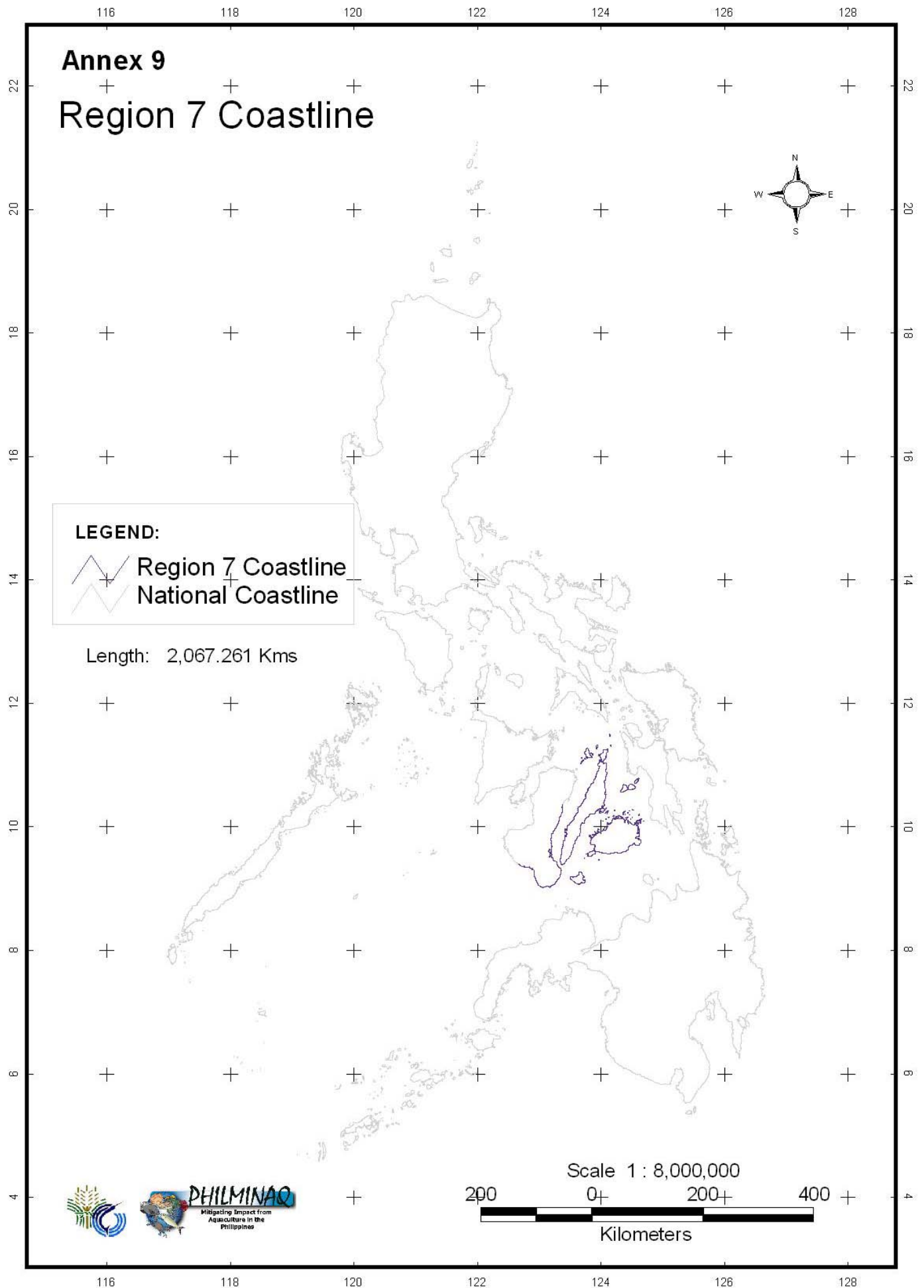


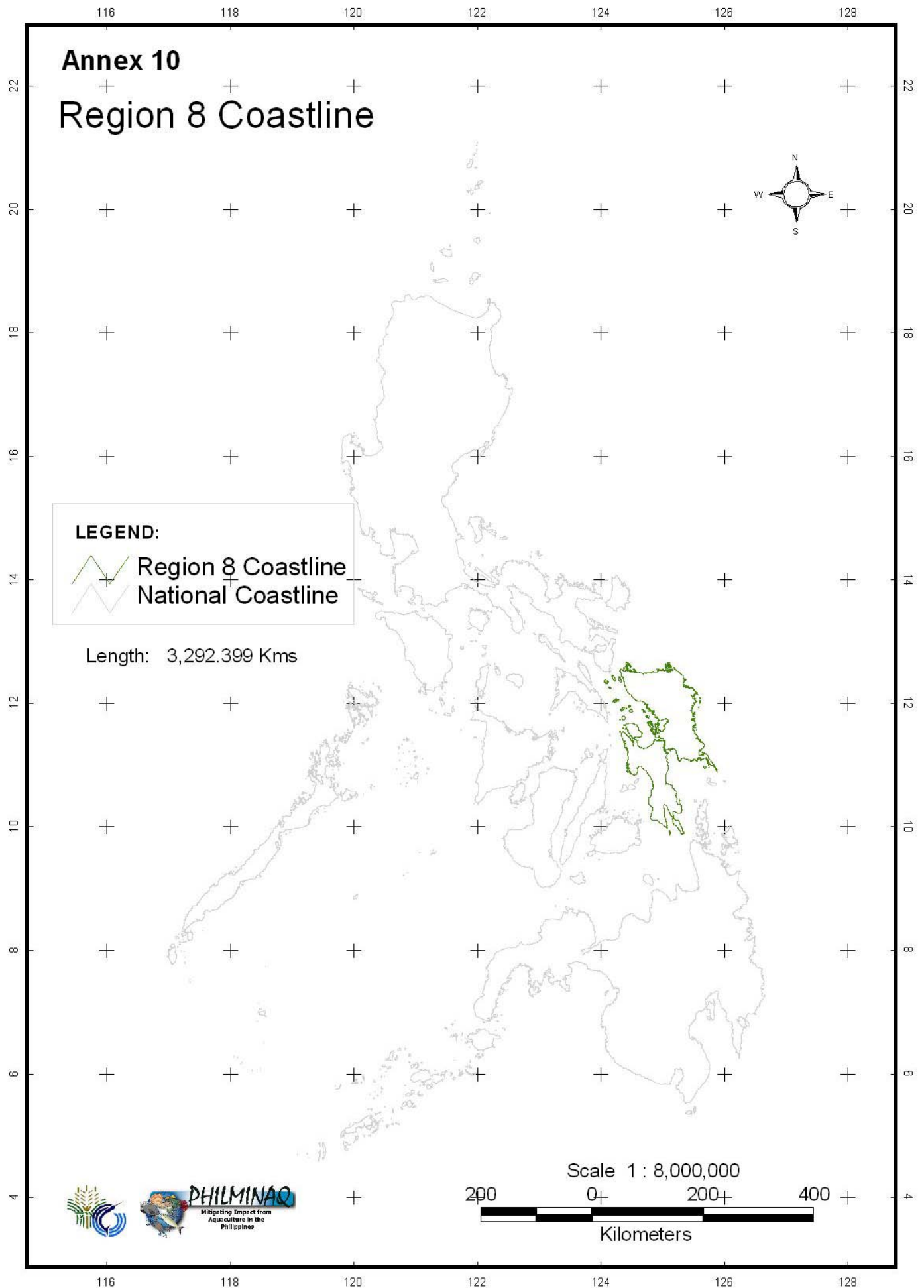


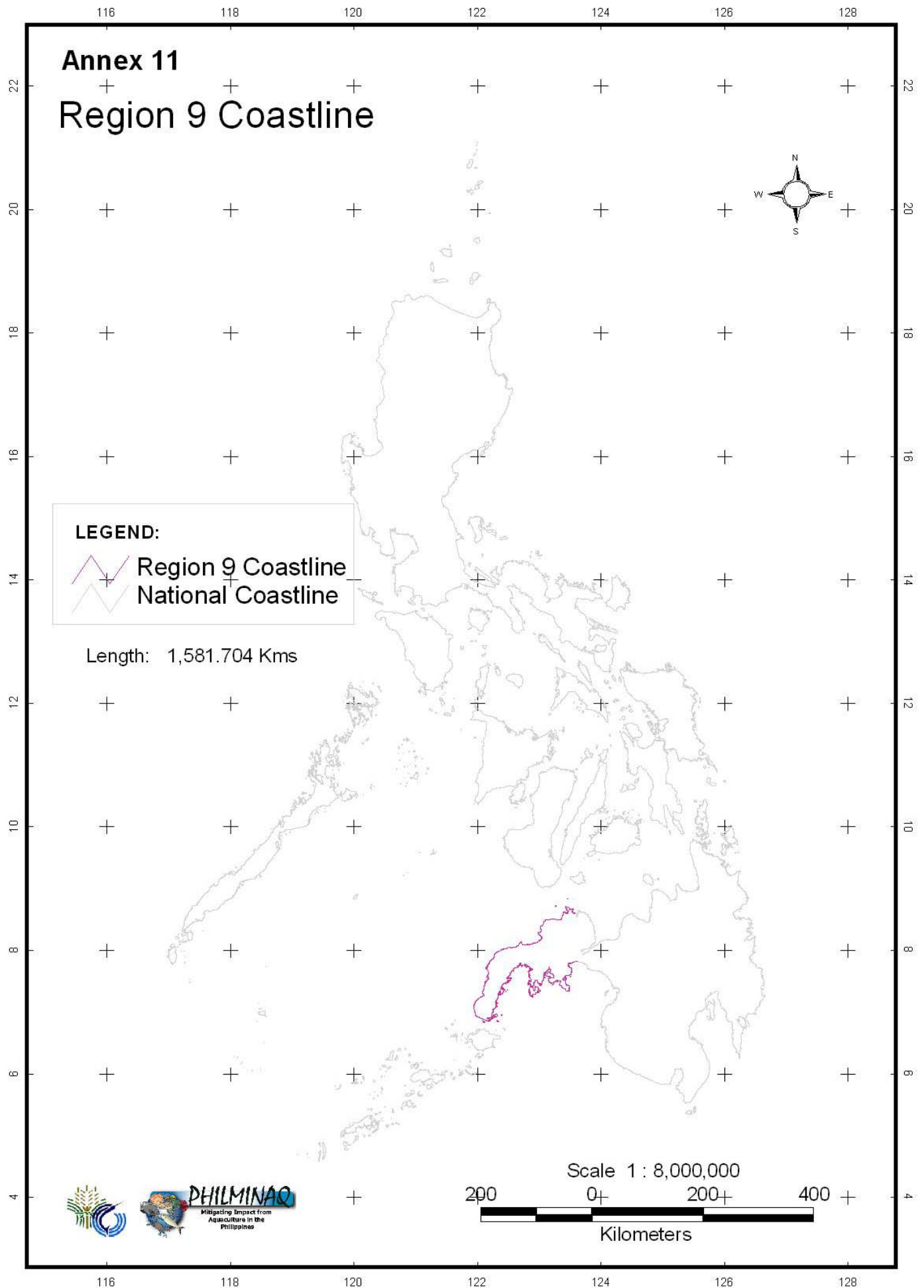


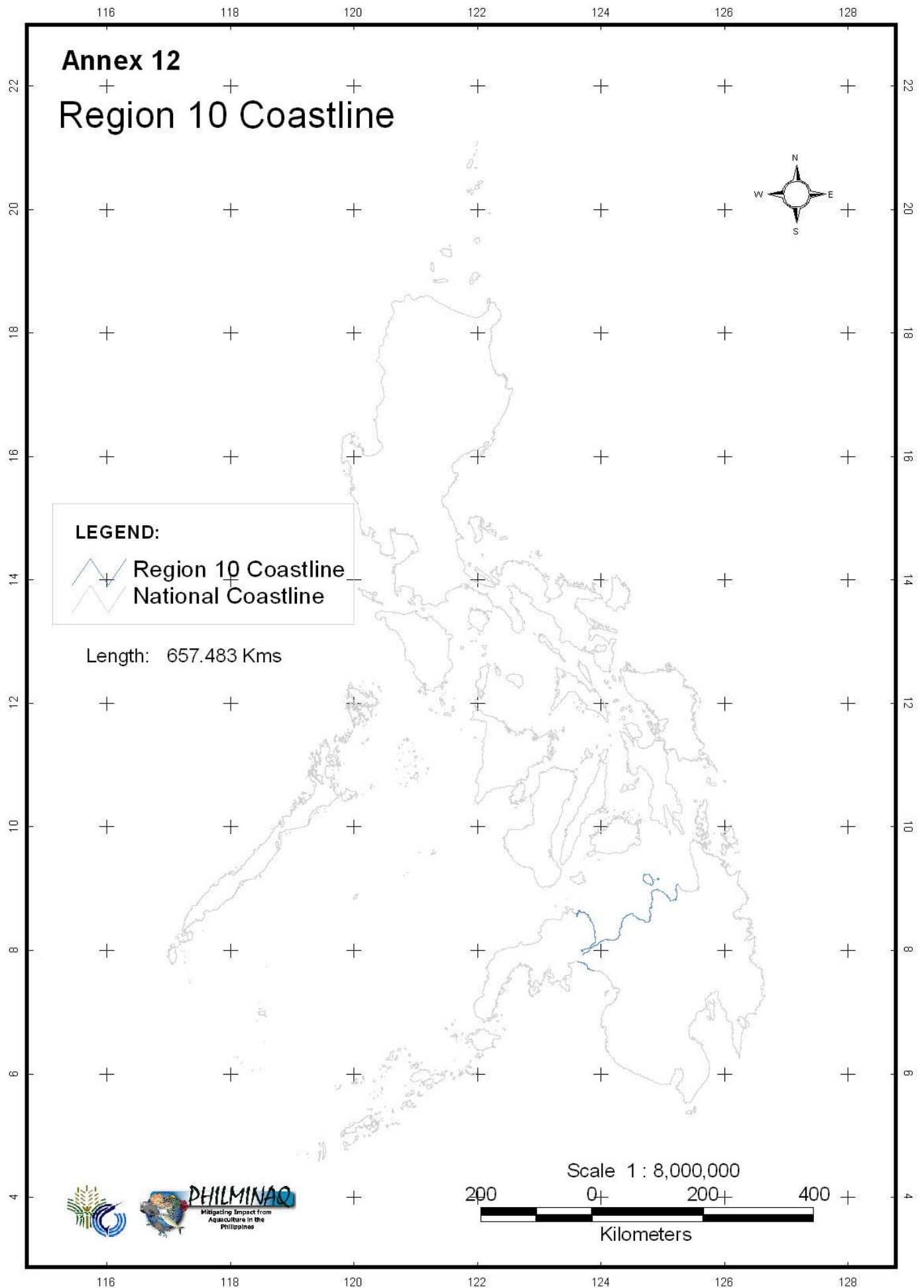


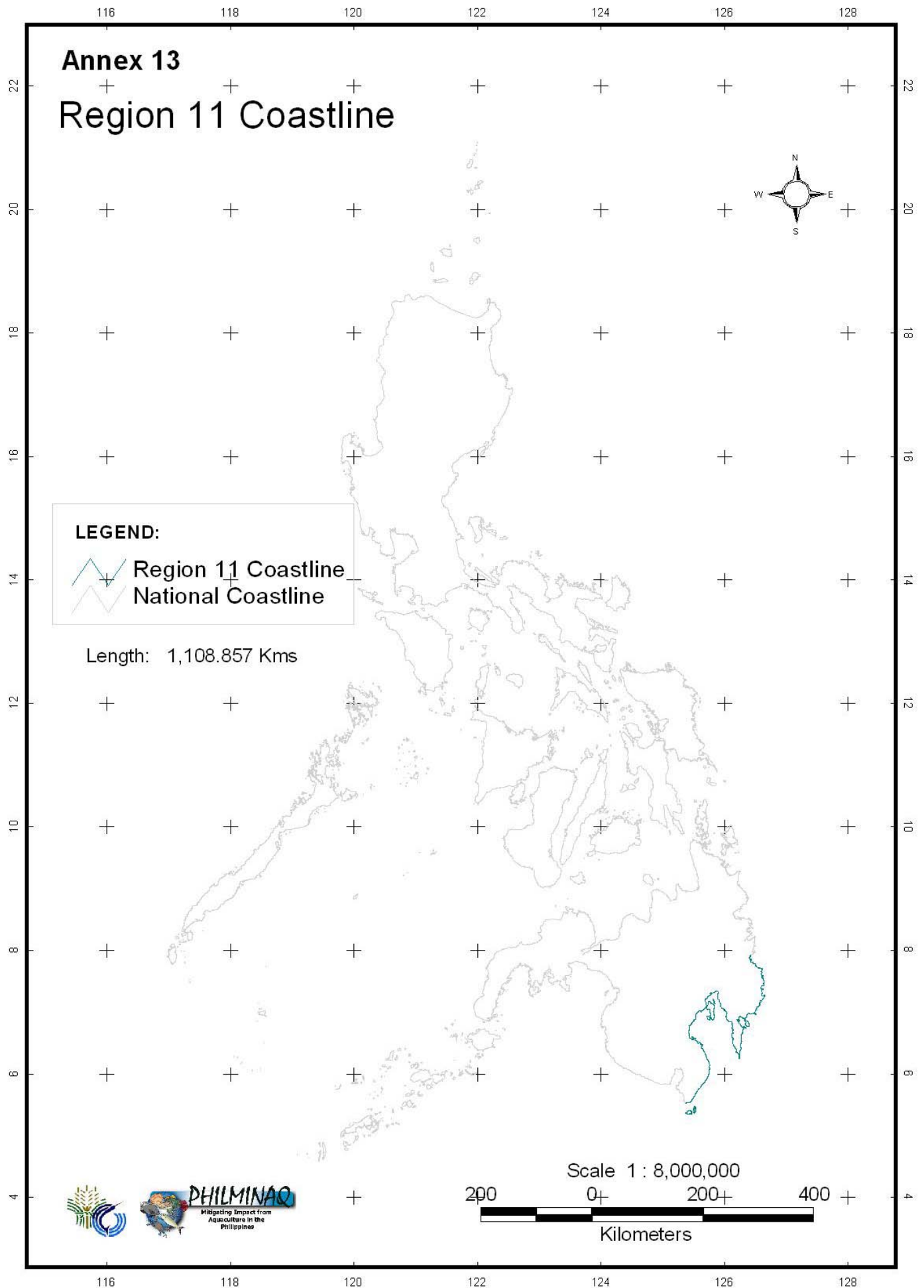


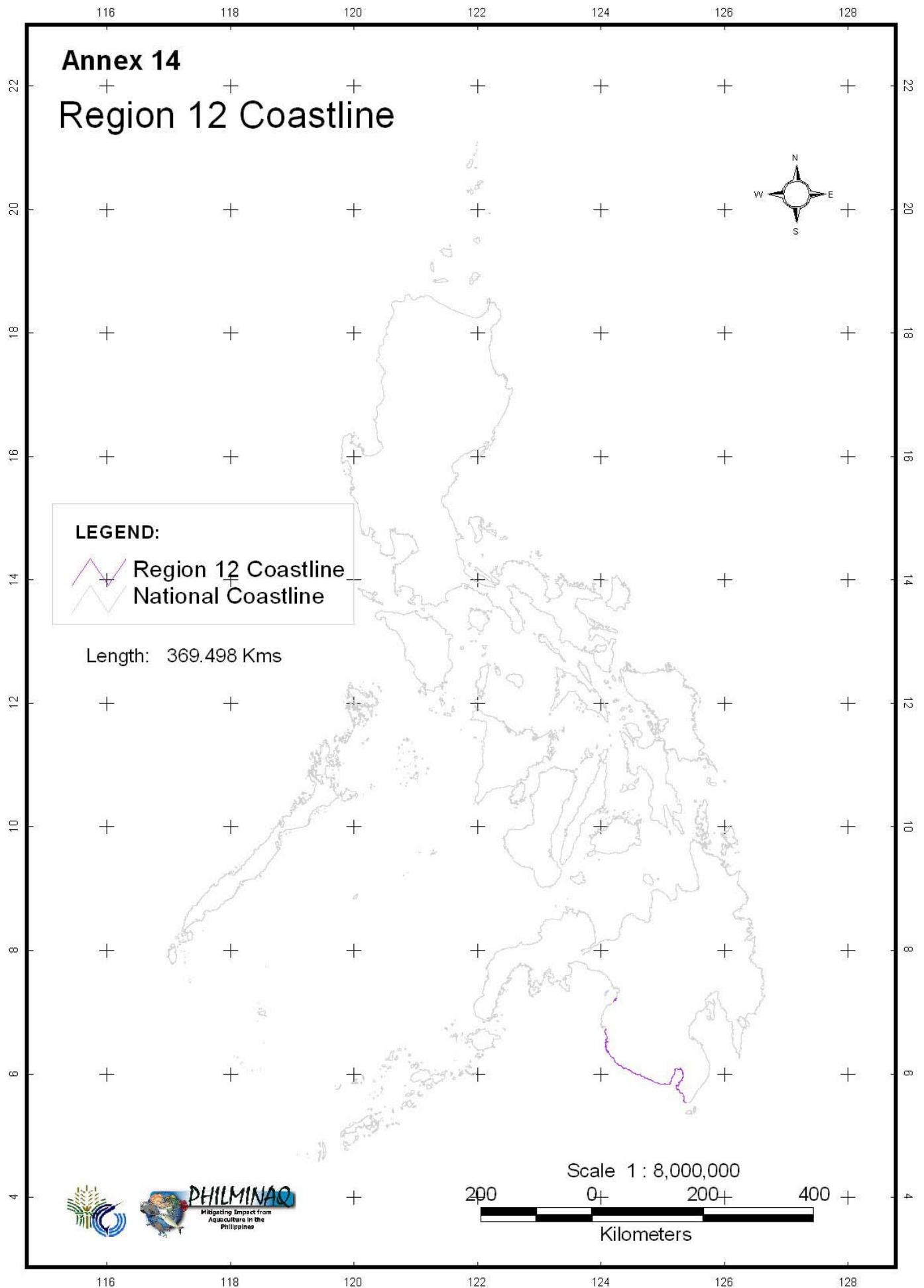


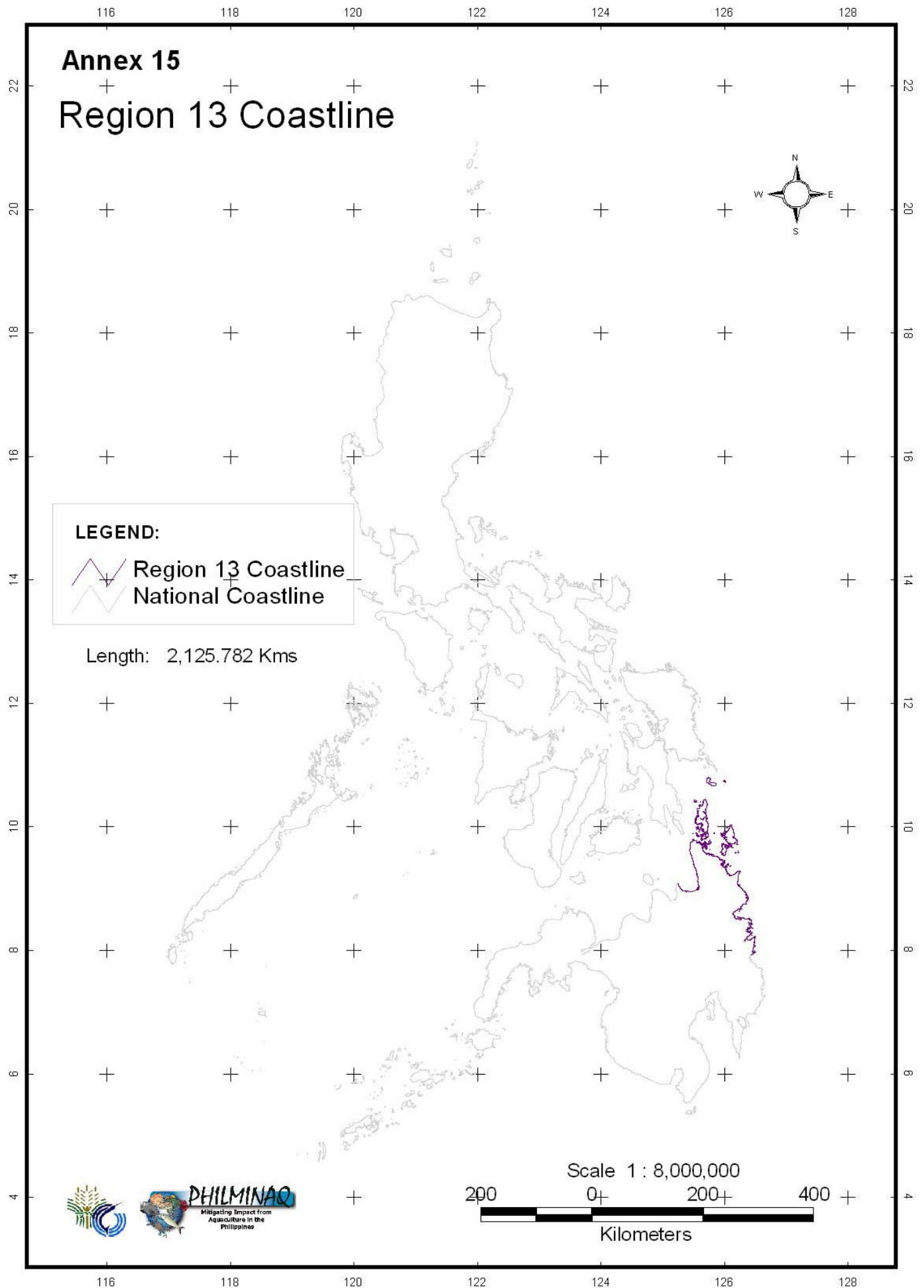


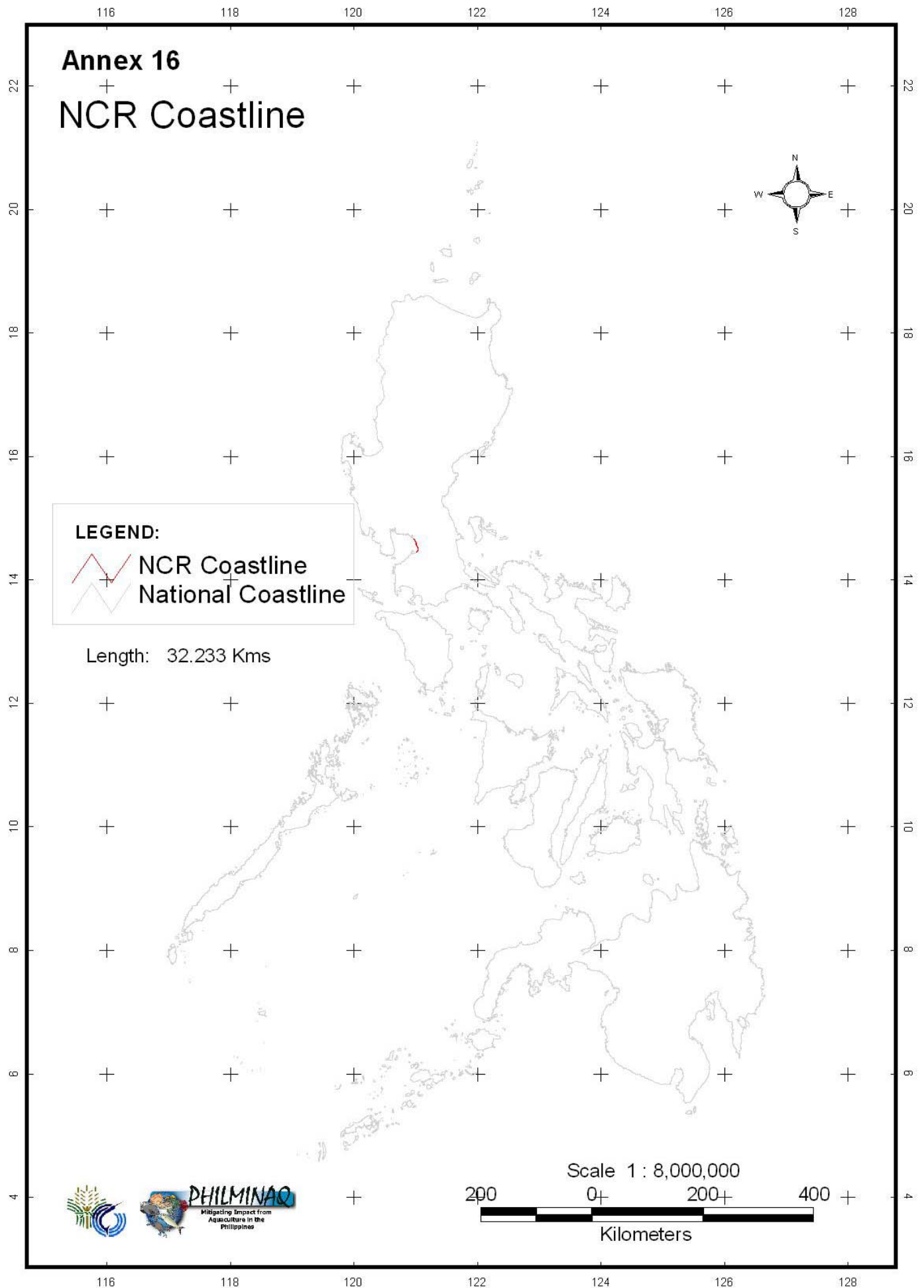


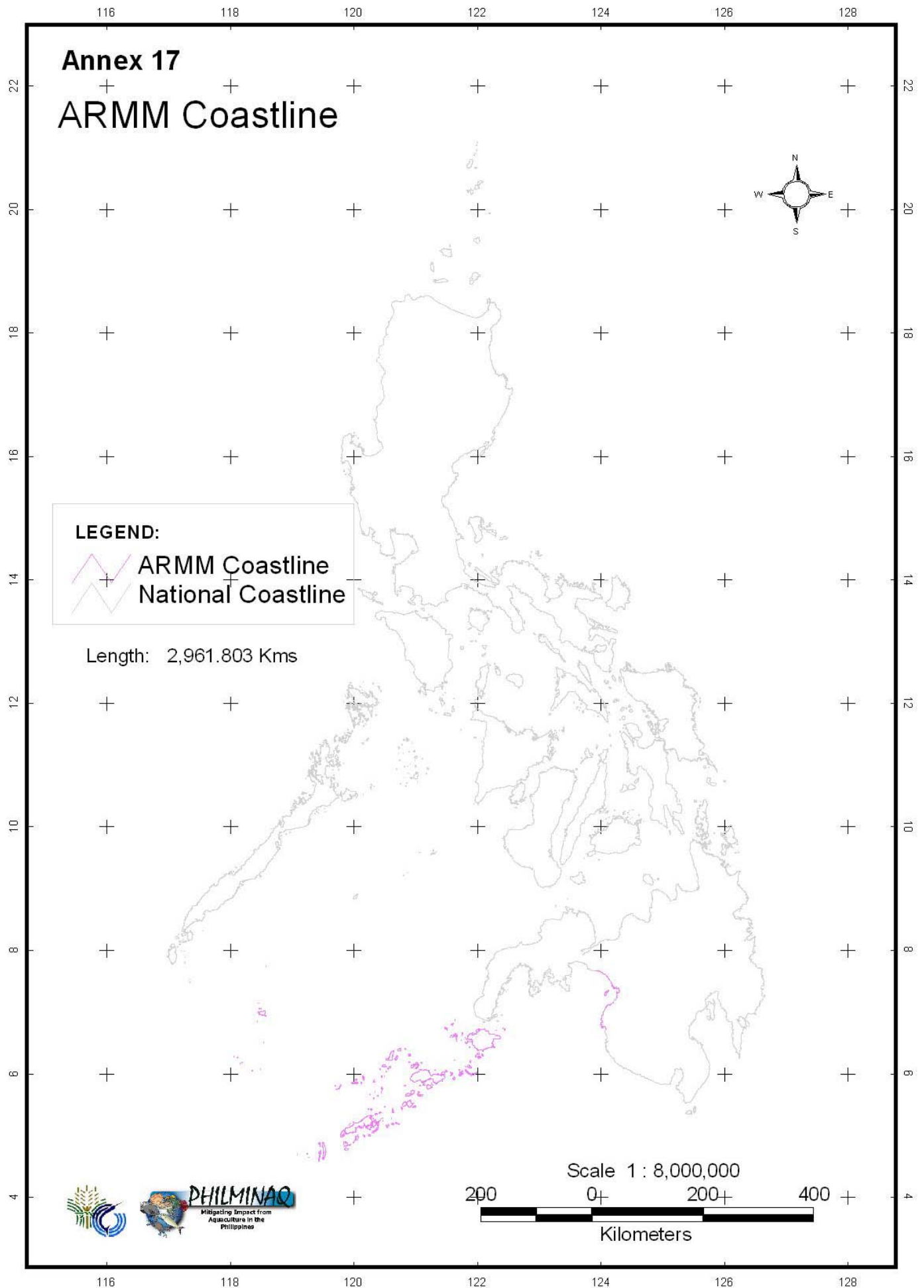












Philippine Coastline Length per Region

Region		Length (Km)
1	Ilocos	724.524
2	Cagayan Valley	1,085.822
3	Central Luzon	961.389
4A	Calabarzon	1,758.068
4B	Mimaropa	6,686.158
5	Bicol	3,492.793
6	Western Visayas	2,202.928
7	Central Visayas	2,067.261
8	Eastern Visayas	3,292.399
9	Zamboanga Peninsula	1,581.704
10	Northern Mindanao	657.483
11	Southern Mindanao	1,108.857
12	Socsargen	369.498
13	Caraga	2,125.782
ARMM	Autonomous Region of Muslim Mindanao	2,961.803
NCR	Metro Manila	32.233