

# the NEAMPAN Studies: Strengthening the subregional cooperation through knowledge sharing on sustainable management of MPAs

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  - ▶ **BACKGROUND:** Relevant acts, Management System of MPAs
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    - ▶ **(Designation Status)** PAs in marine area, Grounds of Wetlands Protected Area Designation, Wetlands Protected Area Designation Guidelines, Process of designation of MPA
    - ▶ **(Management Status)** Consist of management basic plan, Role of each organizations, restriction behaviors
- ▶ **Review and analysis of methodologies applied in the respective MPAs**
  - ▶ **Monitoring and assessment of the current status of MPAs:** Concepts and purposes of National marine ecosystem monitoring program, Stepwise project implementation directions, Implementation system of National marine ecosystem monitoring program, The sampling station number of the national marine ecosystem monitoring program, parameters of National marine ecosystem monitoring program
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    - ▶ **(Designation and Management Status)**
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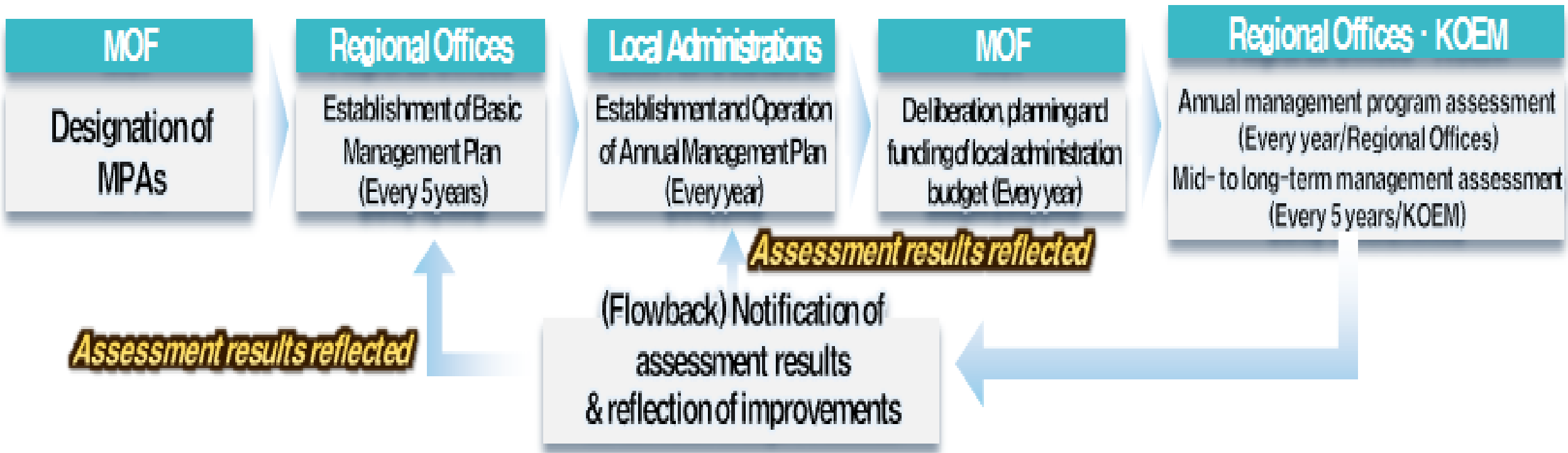
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Ministry	Category of Protected Area	Legislation Concerned
Ministry of Environment	Natural Parks	Natural Parks Act
	Wildlife Protection Districts (Local Administration)	Wildlife Protection and Management Act
Ministry of Oceans and Fisheries	Coastal Wetland Protected Area (tidal flat)	Wetlands Conservation Act
	Marine Protected Area	Conservation and Management of Marine Ecosystems Act
	Environmental Preservation Sea Areas	Marine Environment Management Act
	Fishery Resources Protection Zone	Fishery Resources Management Act
Cultural Heritage Administration	Natural Monument	Cultural Heritage Protection Act
	Scenic Area	

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Ministry	Category of Protected Area	Legislation Concerned	Area Designated as PA(km <sup>2</sup> )	
Ministry of Environment	Natural Parks	<u>National Parks</u>	2,753.71	
		<u>Do Parks</u>	Natural Parks Act	407.52
		<u>Gun Parks</u>		3.77
	Wildlife Protection Districts (Local Administration)	Wildlife Protection and Management Act	3.93	
Ministry of Oceans and Fisheries	Coastal Wetland Protected Area (tidal flat)	Wetlands Conservation Act	1,421.65	
	Marine Protected Area	<u>Marine Ecosystem</u>	259.33	
		<u>Marine Scenery</u>	Conservation and Management of Marine Ecosystems Act	5.23
		<u>Marine Species</u>		91.24
	Environmental Preservation Sea Areas	Marine Environment Management Act	949.12	
Fishery Resources Protection Zone	Fishery Resources Management Act	2,526.0		
Cultural Heritage Administration	<u>Natural Monument</u>	Cultural Heritage	960.19	
	<u>Scenic Area</u>	Protection Act	0.09	

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① An area that has native continuity or rich biodiversity

② An area inhabited or visited by a rare or endangered wild animal or plant

③ An area that has extraordinary scenic, topographic, or geologic value

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## 1. Uniqueness of Topographical-Geologic Features

- ㉠ Site which displays extremely standard or unique topographical and geological features, and is deemed worthy of preservation due to excellent scientific and aesthetic values
- ㉡ Site which preserves the continuity of untouched coastal sand dunes or wetlands, or which shows remarkable development of primitive seascapes such as shore cliffs or sea stacks at the dorsality of coastal wetlands
- ㉢ Site with environmental or human landscapes of outstanding aesthetic value which is deemed to contribute to the elevation of emotion and enhancement of welfare through aesthetic pleasure and recreation

## 2. Large Benthic Species

- ㉠ Site habited by more than 100 species or legally protected species in a single unit mud flat
- ㉡ Site habited by a large colony of species found only in Korea, rare species, or species with high ecological significance
- ㉢ Site known to display higher ecological indices including species diversity compared to other unit mud flats

## 3. Coastal Vegetation and Flora

- ㉠ Site habited by legally protected species
- ㉡ Site in which the area of habitation of coastal vegetation exceeds 0.01km<sup>2</sup>, or in which vegetation habits in an exceptionally extensive manner
- ㉢ Site with excellent preservation of Grade 10 vegetation (Sand dune/salty terrain vegetation) as per the Nature Map drawn by the Minister of Environment in accordance with Article 27 of the 「Enforcement Decree of the Natural Environment Conservation Act」

## 4. seabirds

- ㉠ Site deemed worthy of preservation as the habitat or stopover of legally protected species
- ㉡ Site with appearance of 20,000 individual seabirds
- ㉢ Sites habited or utilized by more than 1% of the total population of a single seabird species

## 5. Other Taxa

- ㉠ Site habited by legally protected fish, amphibians, reptiles or mammals, among which the coastal wetland poses significant impact on the life history of the species

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Preparation	<ul style="list-style-type: none"> <li>•Recommendation of MPA candidate sites</li> </ul>	<ul style="list-style-type: none"> <li>▷ Reflecting the results of marine ecosystem research</li> <li>▷ Designation request from local administration</li> </ul>
	<ul style="list-style-type: none"> <li>•Detailed site investigation</li> </ul>	<ul style="list-style-type: none"> <li>▷ Evaluation on appropriateness of grounds of designation</li> </ul>
▼		
Designation Arrangement	<ul style="list-style-type: none"> <li>•Preparation of Designation Plan (Draft)</li> </ul>	<ul style="list-style-type: none"> <li>▷ Grounds of Designation/Plan</li> </ul>
	<ul style="list-style-type: none"> <li>•Local resident briefing session</li> </ul>	<ul style="list-style-type: none"> <li>▷ Explanation/feedback collection</li> </ul>
	<ul style="list-style-type: none"> <li>•Consultation between related organizations</li> </ul>	<ul style="list-style-type: none"> <li>▷ Corresponding local administration and related government institutes</li> </ul>
▼		
Designation	<ul style="list-style-type: none"> <li>•Notification on Designation of MPA</li> </ul>	<ul style="list-style-type: none"> <li>▷ Notification on Official Gazette</li> </ul>
	<ul style="list-style-type: none"> <li>•Notification on Official Gazette/Information System</li> </ul>	<ul style="list-style-type: none"> <li>▷ MOF notifies on MPA website</li> </ul>



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- ▶ **A literature review of the management plans and strategies of all the NEAMPAN sites in ROK;**

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- ▶ **(Management Status) Consist of management basic plan, Role of each organizations, restriction behaviors**

1. Policy directions concerning wetland conservation
2. Items concerning wetland survey
3. Items concerning status of distribution, area and life diversity of wetland
4. Items concerning adjustment with other national basic plans related to wetland
5. Items concerning international cooperation for wetland conservation
6. Other items determined by presidential decree as the items required for wetland conservation
  - Analysis of causes for damages to wetland and reclamation of damaged wetland
  - Cooperation items for related central administration institutions and local administrations concerning wetland conservation
  - Cultivation of specialized manpower and specialized institutions for wetland conservation
  - Education and publicity for wetland conservation
  - Required financial resources and procurement plans of financial resources for enforcement of basic plans for wetland conservation according to the regulations of Article 5 of the Act

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(MOF-KOEM(MPA Center)) International Cooperation, Raising Awareness (national level),  
Monitoring, subsidization

- (Monitoring) National marine ecosystem monitoring Program, MPA citizen monitoring Program, etc.
- (Raising Awareness) World Wetland day Ceremony, National Marine Protected Area Congress, etc.
- (International Cooperation) Ramsar Convention (Ramsar Site Designation, Wetland City Accreditation), Response to IUCN, NEASPEC, etc.
- (Subsidization Rate) Government Expenditure 70% : Local Expenditure 30%

(Regional Office) Establishment of 5-Year Basic Management Plan, Provision  
Assessment of Subsidies

- Collection of opinions of local administrations·regional commission·local residents
- (Metropolitan·Local administrations) Formation and operation of regional management commission, implementation of yearly programs, and inspection on restrictions
- Providing aid (environment improvement, income enhancement) and conservation facilities·amenities (visitor center, eco trail) to residents

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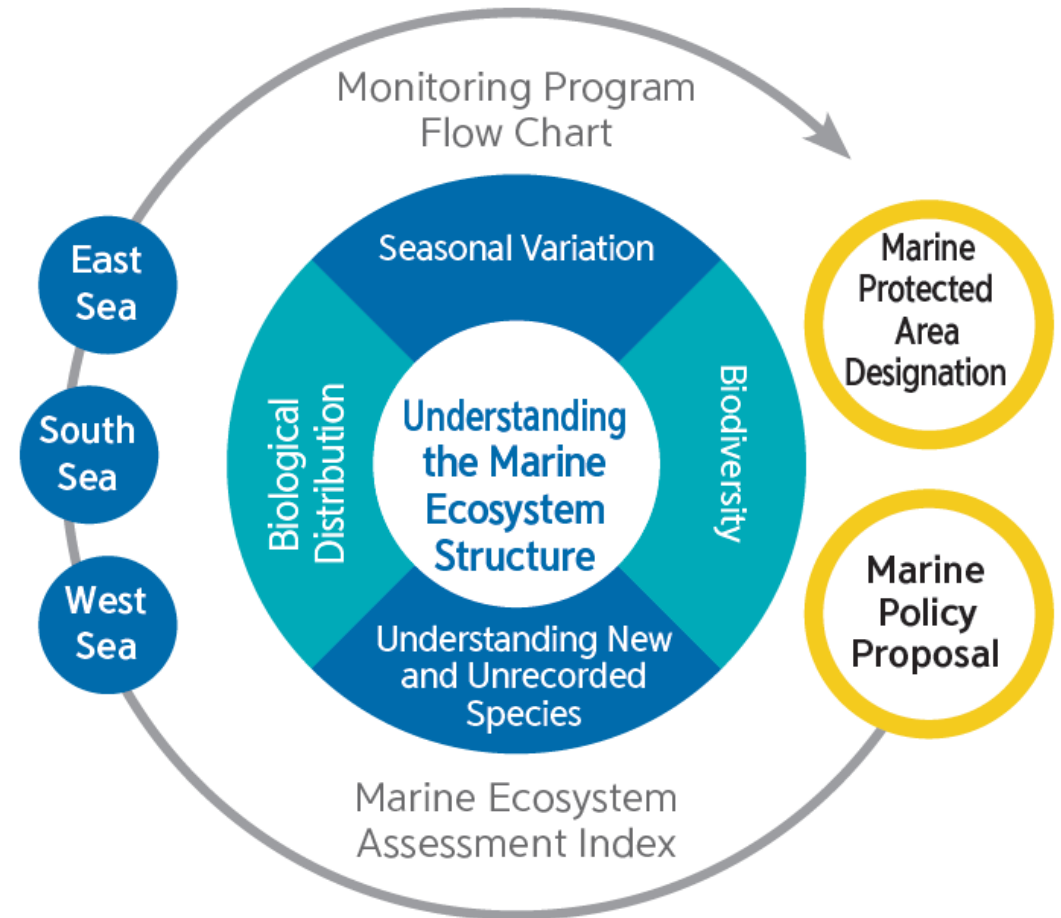
- ▶ (Management Status) Consist of management basic plan, Role of each organizations, restriction behaviors

- ① Construction or extension of buildings or other artificial structures (only applicable when such extension increases the floor area of the building or other artificial structure by two times the previous floor area) and change in soil characteristics
- ② Act of increasing or decreasing the water level or water amount of wetland
- ③ Act of collecting soil, sand, gravel or stone, etc.
- ④ Act of mining minerals
- ⑤ Act of artificially importing, cultivating, capturing or collecting plant or animals (except when local residents continuously cultivate, capture or collect during the period set by joint ordinance for a means of living or leisure activity)

Application of act restrictions is excluded concerning fishery acts for livelihood of regional residents

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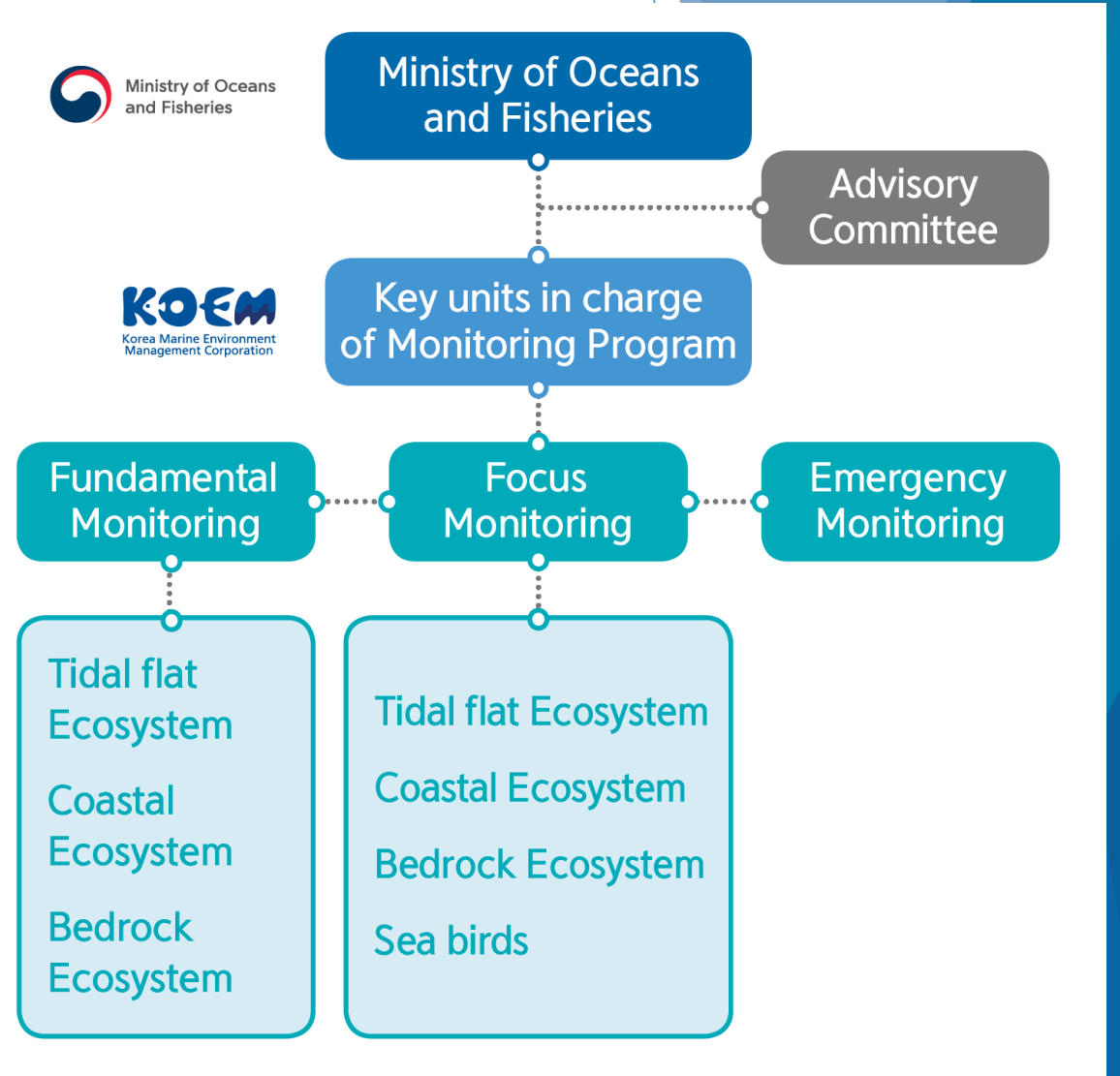
Step1(2015~2020): Tidal flat, inshore, offshore monitoring (two-year basis)

Year	2015/2017/2019	2016/2018/2020
Area	West sea, South-west sea	South-east sea, East Sea, Jeju

Step2(2021~2025) : Tidal flat, inshore, offshore monitoring (one-year basis)

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	Total No. (828 stations)		
	Fundamental survey (555 stations)		Hot spot survey (273 stations)
	Odd year (426 stations)	Even year (229 stations)	
Tidal flat	231 stations	132 stations	189 stations
Rocky shore	11 stations	25 stations	6 stations
Inshore	73 stations	56 stations	38 stations
Offshore	11 stations	16 stations	6 stations
Sea bird	–	–	34 stations

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Large category	Small category	Parameter	Content
Biotic	Plankton	Bacteria	total number of bacteria
		Phytoplankton	chlorophyll a (total/nano), species composition, biomass
		Zooplankton	species composition, biomass
	Benthos	Fish larve/juvenile	species composition, biomass
		Meiobenthos	species composition, biomass, density
		Macrobenthos	species composition, biomass, density, health index
		Marine algae	species composition, coverage, biomass
		Seaweed	species composition, coverage, biomass
		Halophyte	species composition, coverage, biomass
		Nekton	Fish
	Crustacea		species composition, biomass
	Cephalopod		species composition, biomass
	Fisheries Resource		species composition, biomass
	Abiotic	Sea Bird	
Environment		Sea water	T, S, Nutrient, DO, SPM, POC/PON, heavy metal
		Tidal flat sediment	slope, sedimental rate, AVS, COD, IIL, heavy metal
		Subtidal sediment	grain size, organic carbon, total nitrogen, carbonate, heavy metal
Socio-Economy		Socio-economy status	nature, industry, tourism, environment etc.
		Economic value	evaluation ecological, economic value
		Citizen awareness	Investigation of citizen conservation awareness



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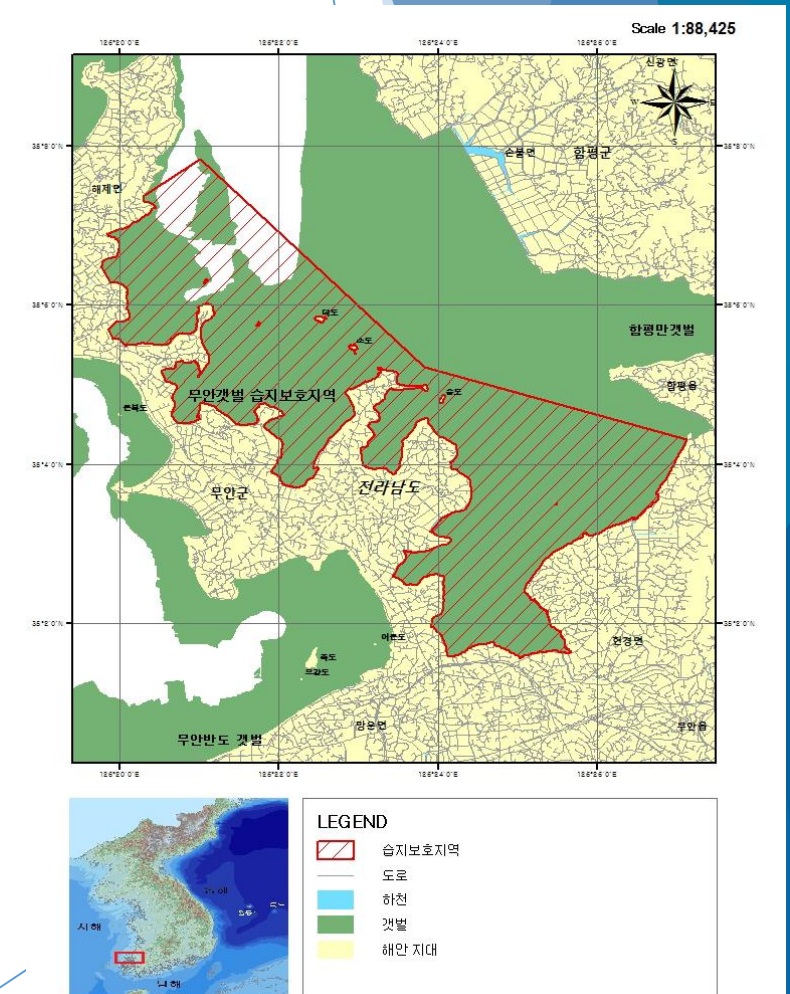
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    - ▶ (Assessment)

# Case study sites

## 1. Muan tidal flat wetland protected area

### Basic information

Country	Republic of Korea
Name of the MPA	Muan Tidal-flat Wetland Protected Area
Location	Muan-gun, Jeollanam-do, Republic of Korea
Site area (km <sup>2</sup> )	42km <sup>2</sup>
Marine components	intertidal (sand and mudflat)
Year of establishment	2001-12-28
Related Law	Wetland Conservation Law

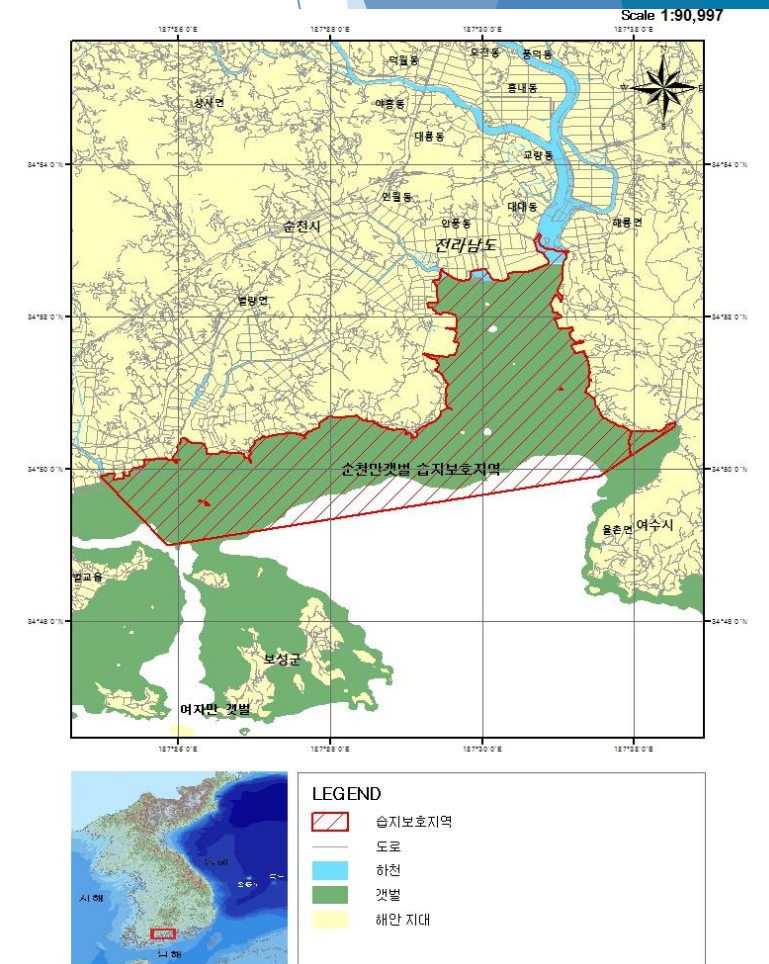


# Case study sites

## 2. Suncheon bay tidal flat wetland protected area

### Basic information

Country	Republic of Korea
Name of the MPA	Suncheon bay Tidal-flat Wetland Protected Area
Location	Suncheon-si, Jeollanam-do, Republic of Korea
Site area (km <sup>2</sup> )	28km <sup>2</sup>
Marine components	intertidal (sand and mudflat)
Year of establishment	2003-12-31
Related Law	Wetland Conservation Law



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Thank you