

Wetland Protected Area in Republic of Korea (Gochang, Muan, Suncheon bay tidal flat)

2018.12.20.(THU)

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Marine Protected Area Center

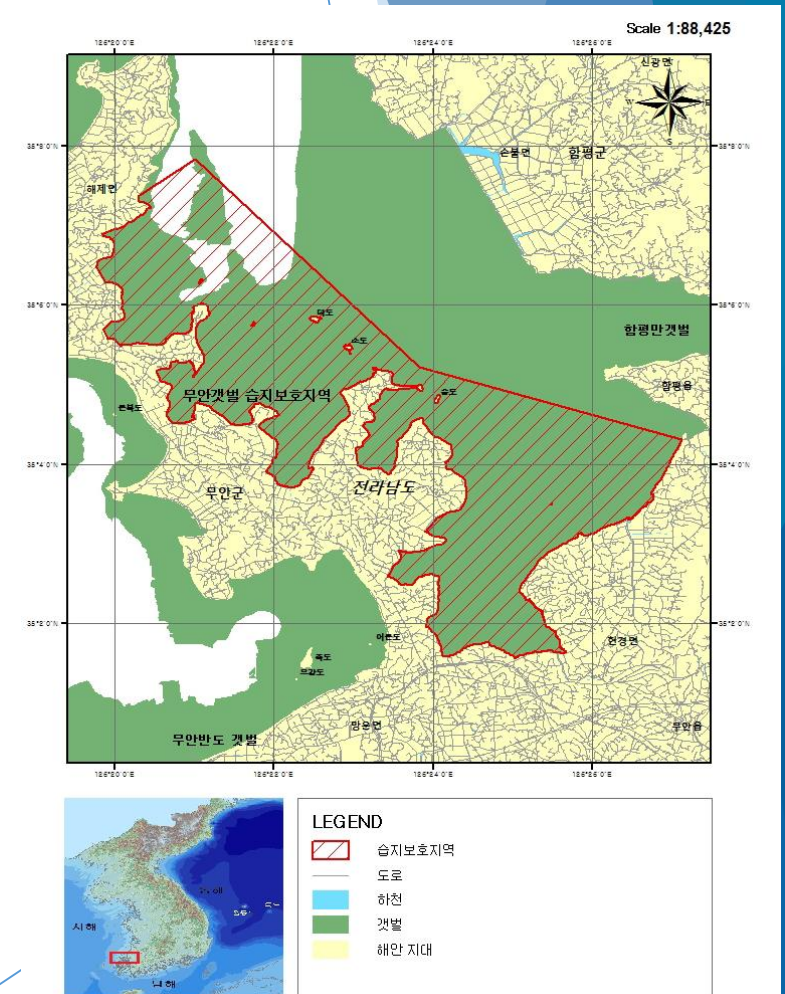
Korea Marine Environment Management Corporation

Review of key features and management of the NEAMPAN sites in light of the outline of MPA study

1. Review of management plans / strategies (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 ²)	42km ²
Marine components	intertidal (sand and mudflat)
Year of establishment	2001-12-28
Related Law	Wetland Conservation Law

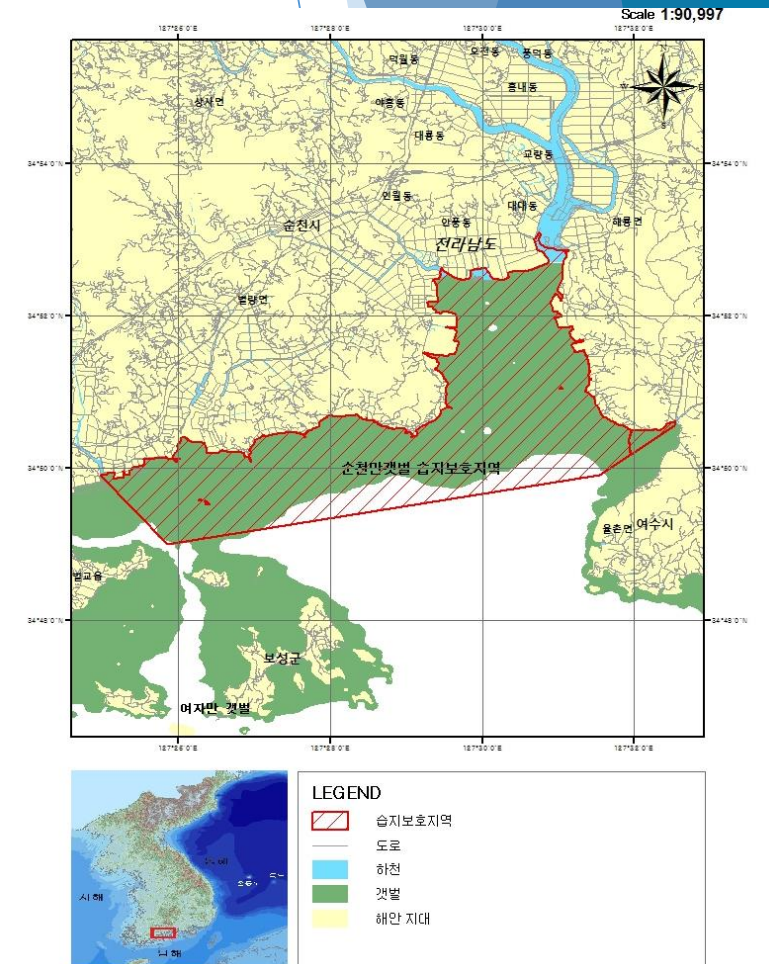


Review of key features and management of the NEAMPAN sites in light of the outline of MPA study

1. Review of management plans / strategies (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 ²)	28km ²
Marine components	intertidal (sand and mudflat)
Year of establishment	2003-12-31
Related Law	Wetland Conservation Law

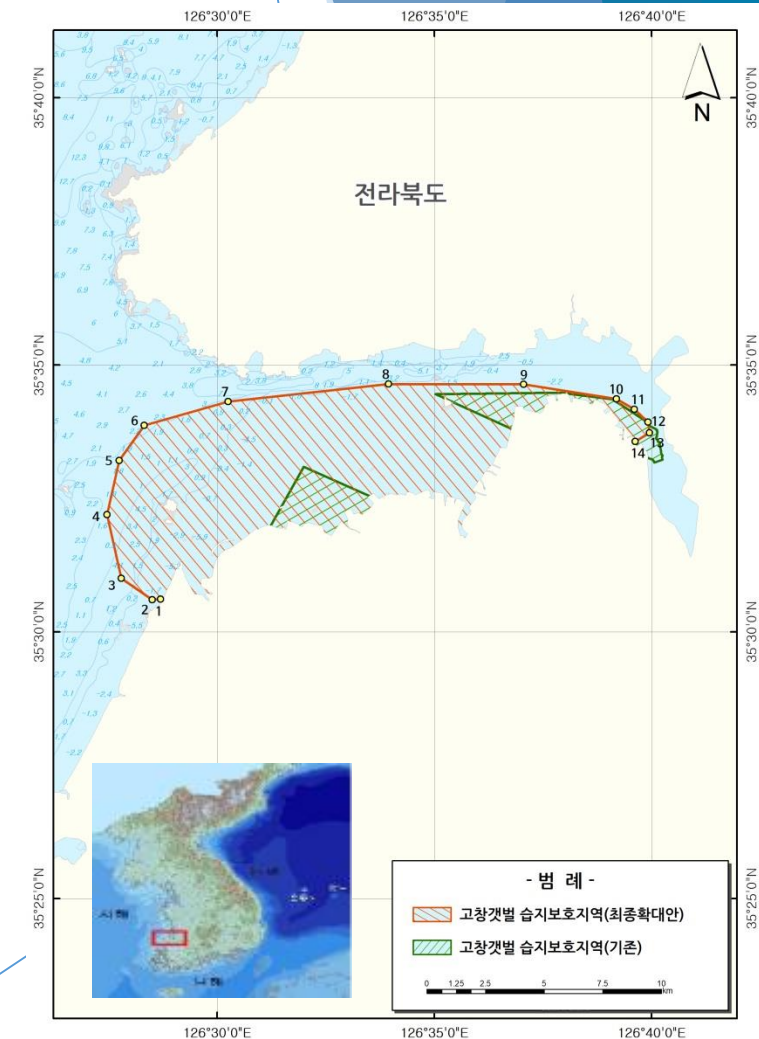


Review of key features and management of the NEAMPAN sites in light of the outline of MPA study

1. Review of management plans / strategies of the selected NEAMPAN site (Gochang tidal flat wetland protected area)

Basic information

Country	Republic of Korea
Name of the MPA	Gochang Tidal-flat Wetland Protected Area
Location	Gochang-gun, Jeollabuk-do, Republic of Korea
Site area (km ²)	64.66km ²
Marine components	intertidal (sand and mudflat)
Year of establishment	2018-09-03
Related Law	Wetland Conservation Law



Review of key features and management of the NEAMPAN sites in light of the outline of MPA study

1. Review of management plans / strategies (Muan tidal flat wetland protected area)

➤ Muan Tidal flat wetland protected area management master plan(2016, MOF)

<Management Strategy> 4 strategies, 13 detailed project plans

[Goal] Harmony of Wetland and Human of Sustainable Development of Muan Tidal Flat

- Strategy 1: Conservation and Management of Nature Resources

→ 4 Detailed project plans

- Strategy 2: Activation on a Muan Ecological tidalflat center

→ 4 Detailed project plans

- Strategy 3: Enhancement of Muan tidalflat management Governance with stakeholders participation

→ 2 Detailed project plans

- Strategy 4: Management of Quality of life of stakeholders

→ 3 Detailed project plans

Review of key features and management of the NEAMPAN sites in light of the outline of MPA study

1. Review of management plans / strategies (Suncheon bay tidal flat wetland protected area)

- Suncheon bay Tidal flat wetland protected area management master plan(2018, MOF/KOEM)

<Management Strategy> 4 strategies, 17 detailed project plans / total budget: \$45,773,200/5years

[Goal] Sustainable Development of Suncheon bay tidal flat wetland protected area of Ecology Capital

- Strategy 1: Conservation
→ 5 Detailed project plans
- Strategy 2: Management
→ 5 Detailed project plans
- Strategy 3: Capacity
→ 3 Detailed project plans
- Strategy 4: Abundant
→ 4 Detailed project plans

Review of key features and management of the NEAMPAN sites in light of the outline of MPA study

1. Review of management plans / strategies (Gochang tidal flat wetland protected area)

➤ Gochang tidal flat wetland protected area management master plan(2013, MOF/ROOF)

<Management Strategy> 5 strategies, 25 detailed project plans / total budget: \$5,579,200

- Strategy 1: Committee Activation

→ 2 Detailed project plans

- Strategy 2: Management of pollution source

→ 5 Detailed project plans

- Strategy 3: Resource Management

→ 5 Detailed project plans

- Strategy 4: Awareness inceasing and residents capacity building

→ 6 Detailed project plans

- Strategy 5: Operating tidal flat visitor center

→ 7 Detailed project plans

2. Monitoring and assessment of designated MPAs

Monitoring parameters (related to outline 2.1)

➤ 2017 National Marine Ecosystem Monitoring Program(Annual)

<Monitoring parameters>

1. Sedimentary Environments

(granularity, organic matter concentration, trace metals concentration)

2. Macrobenthic Animals

(number of species, inhabitation density, biomass,)

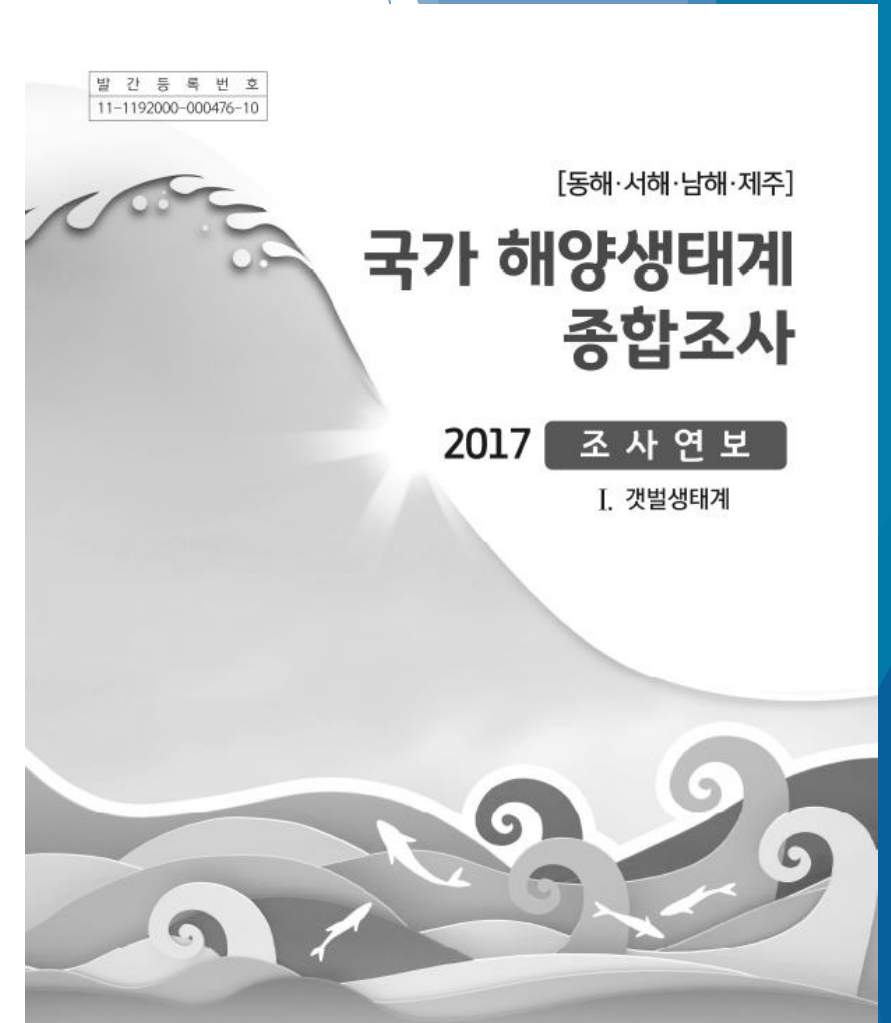
3. Salt Plants

(character species, companion species, vegetation area, colony area, dry weight)

4. Sea Birds

(number of individuals, number of species, dominance value, species diversity)

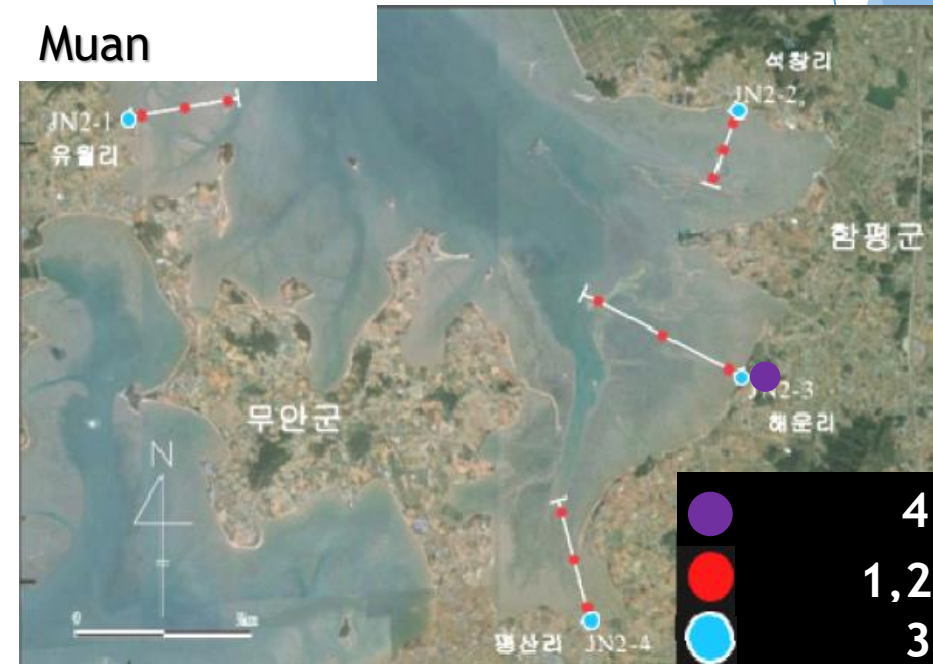
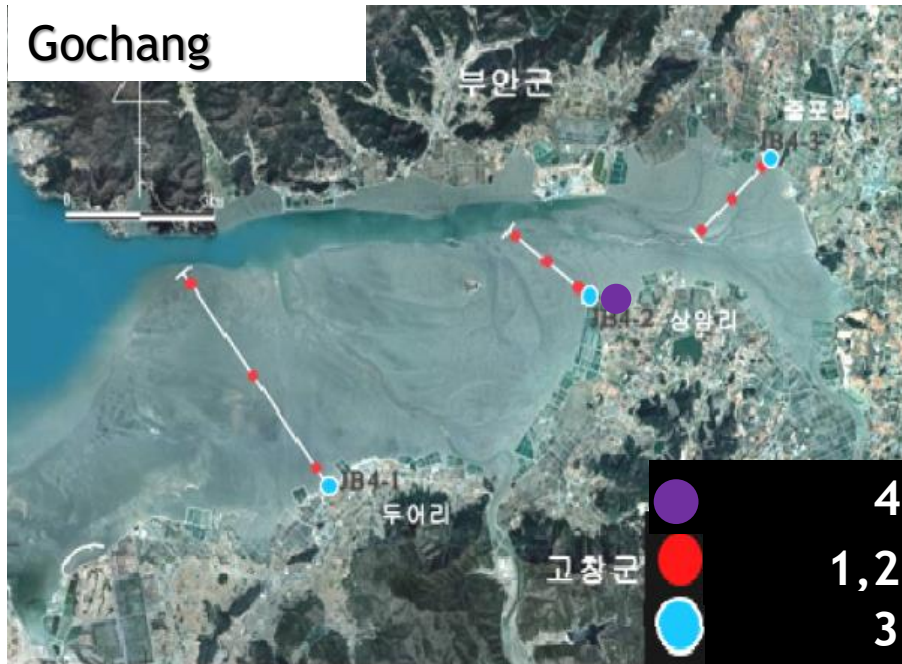
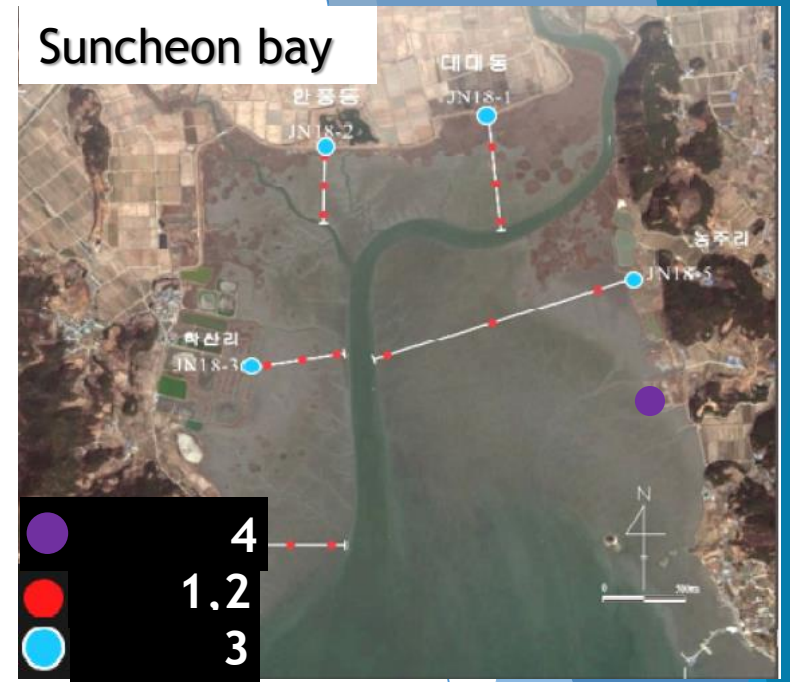
5. Residents Awareness(survey method)



2. Monitoring and assessment of designated MPAs

Monitoring parameters (related to outline 2.1)

- 2017 National Marine Ecosystem Monitoring Program(Annual)
 1. Sedimentary Environments
 2. Macrobenthic Animals
 3. Salt Marshes (Salt Plants)
 4. Sea Birds
 5. Residents Awareness (survey method)

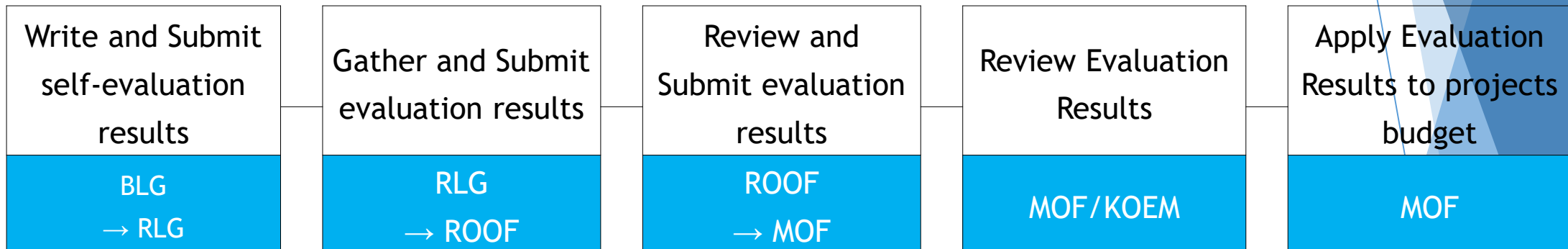


2. Monitoring and assessment of designated MPAs

Evaluation of data (related to outline 2.2)

- Annual Management Evaluation Process (Updated in 2018)

Main Agent: Regional office of oceans and fisheries



BLG: Basic Local Government

RLG: Regional Local Government

ROOF: Regional Office of Oceans and Fisheries

MOF: Ministry of Oceans and Fisheries

KOEM: Korea Marine Environment Management Corporation

2. Monitoring and assessment of designated MPAs

Evaluation of data (related to outline 2.2)

➤ Annual Management Evaluation Form (Updated in 2018)

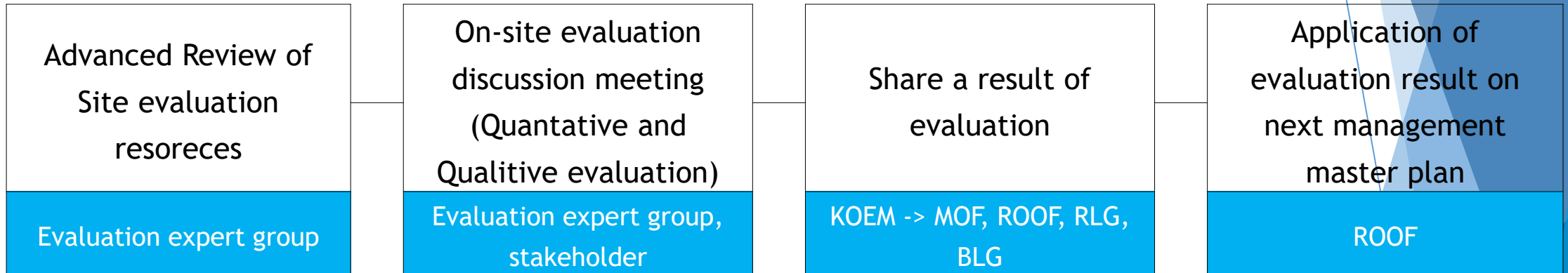
Management Category(Score)	Evaluation Indicator	Score
Management base (2)	Composition of Regional Management Committee	Composition: 1 None: 0 *Establishment of Regional Regulation : add 1
	Host result of Regional Management Committee Meeting <Fuctions of Regional Management Committee> 1. Establishment and Amendment of a management master plan 2. Establishment and Amendment of annual detailed project plans 3. Evaluation of management project results	Twice : 1 Once : 0.5 None : 0
Projects Effect (3)	Development efforts of MPA project effect <Project Category> 1. CEPA efforts and outcomes 2. Site Management and Environment conservation efforts and outcomes 3. Supporting resident and Providing benefit efforts and outcomes	Very good : 3. Good : 2.5 Normal : 2 Insufficient : 1
Budget Execution (3)	Annual Rate of Budget Execution	90%~ : 3 / 80%-90% : 2.5 / 70%-80% : 2.0 / 60%-70% : 1.5 / ~60% : 0
Participation (2)	Did MPA Manager (Basic local government manager) participate workshops or capacity building programs?	participation : 1 None : 0
	Did MPA Stakeholders(residents, NGO) participate workshops or capacity building programs?	participation : 1 None : 0

2. Monitoring and assessment of designated MPAs

Assessment of data (related to outline 2.2)

- Mid-term Management Effectiveness Evaluation Process(quinquennials)

Main Agent: Korea Marine Environment Management Corporation



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2. Monitoring and assessment of designated MPAs

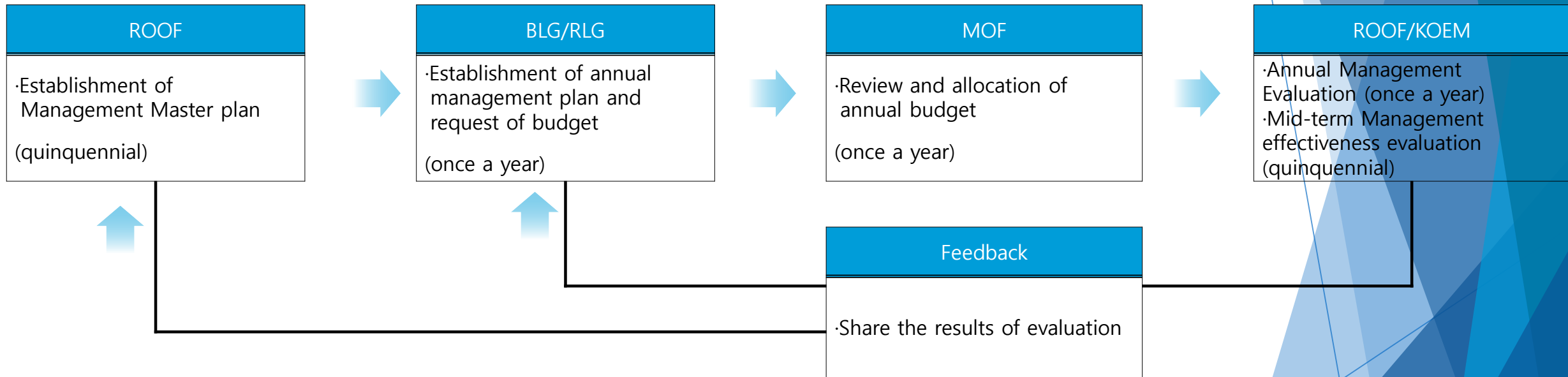
Assessment of data (related to outline 2.2)

- Mid-term Management Effectiveness Evaluation Form(quinquennials): 5 categories, 17 questions

Management Section	Question	Score(Likert Scale, 1-5)
Management base (3)	MPA regulation	
	Secure of MPA information	
	Level of stakeholder awareness	
Management plan (3)	MPA Goal	
	Understanding of status of use and threat factors	
	Establishment of Conservation and Management plan	
Input of Resources (3)	Research and Monitoring	
	Management human resources	
	Secure of budget	
Management process (5)	Stakeholder communication	
	Management and supervision of regulation observance	
	Education and Awareness increasing Program	
	Education and capacity building of Management staff	
	Supplement of public relations(PR) and information resources	
Management result (3)	maintain of purpose of MPA designation	
	Management of conflict factors	
	Appropriateness of charging management price and input of income	

3. Feedback of assessment results to management plans and practices

- (Annual Evaluation) Application of result: Review annual projects budget
- (Mid-term Evaluation) Application of result: Management master plan establishment



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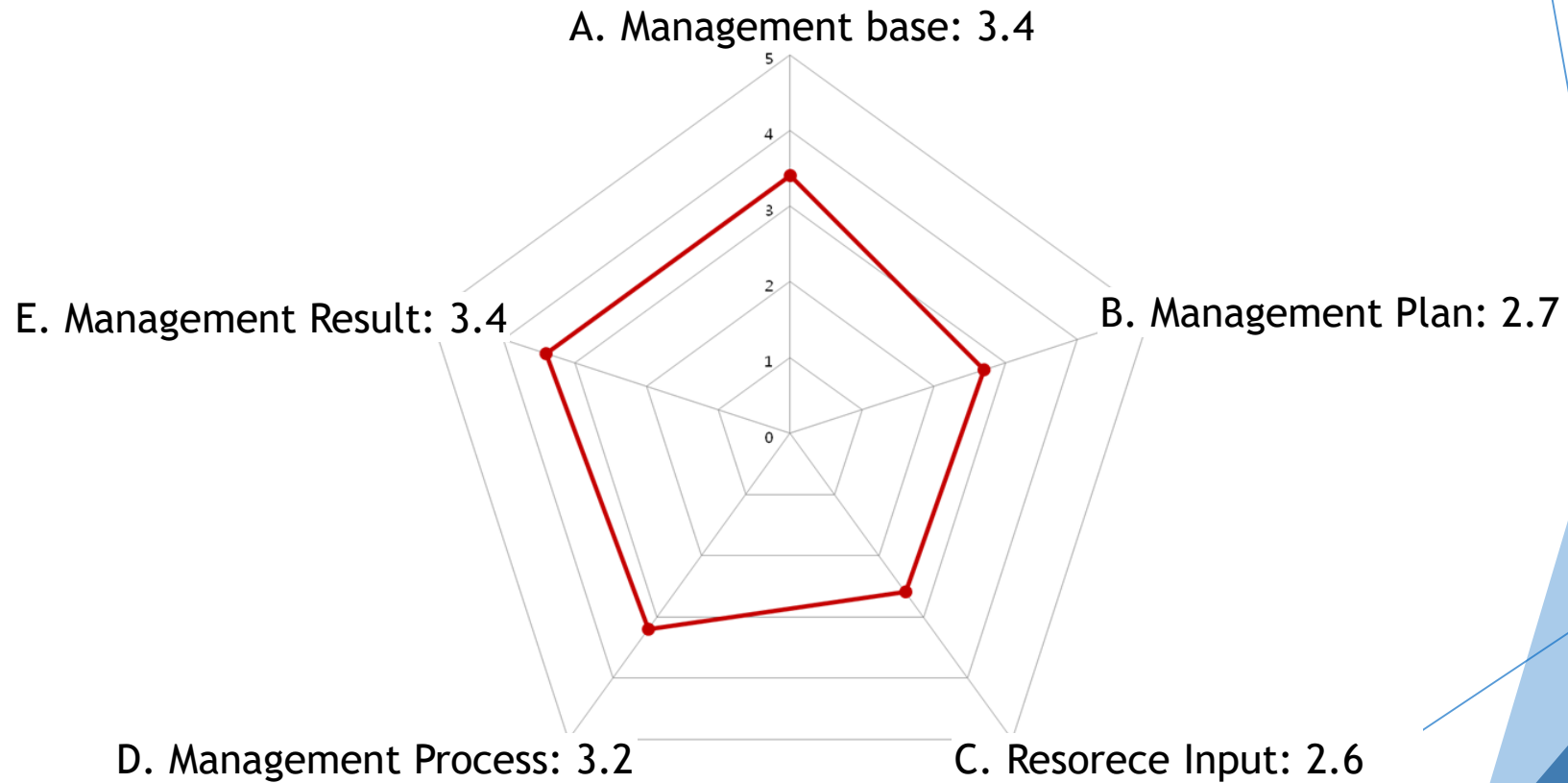
4. Case studies

➤ Gochang tidal flat wetland protected area MEE Results(2017)

Management Section	Division	Score	Section average	Average
Management base (3)	MPA regulation	4	3.4	3.1
	Secure of MPA information	2		
	Level of stakeholder awareness	3.5		
Management plan (3)	MPA Goal	3	2.7	
	Understanding of status of use and threat factors	2		
	Establishment of Conservation and Management plan	3		
Input of Resources (3)	Research and Monitoring	2	2.6	
	Management human resources	3		
	Secure of budget	2.3		
Management process (5)	Stakeholder communication	3.5	3.2	
	Management and supervision of regulation observance	2.7		
	Education and Awareness increasing Program	3.5		
	Education and capacity building of Management staff	3.5		
	Supplement of public relations(PR) and information resources	3		
Management result (3)	maintain of purpose of MPA designation	3.5	3.4	
	Management of conflict factors	3.7		
	Appropriateness of charging management price and input of income	3.2		

4. Case studies

➤ Gochang tidal flat wetland protected area MEE Results(2017)



For information:

Meeting objectives

1. To ensure the coherence of the studies
2. To share preliminary view of the study
3. To share availability of information and expected challenges in the study
4. To discuss any adjustments needed for the outline of the study

Outline of the study (as in the TOR)

- 1. Review of management plans / strategies of the selected NEAMPAN site**
 - 1.1 Basic information of the target MPA
 - 1.2 Background of strategic / management plan of the target MPA
 - 1.3 Objective of MPA management plan
 - 1.4 Key contents of the management plans
- 2. Monitoring and assessment of designated MPAs**
 - 2.1 Monitoring parameters
 - 2.1.1 Areas addressed by the monitoring parameters: biological, socio-economic, environmental
 - 2.1.2 Monitoring bodies and collection of data
 - 2.2 Assessment of data
 - 2.2.1 Assessment criteria and responsibilities: How and who evaluate the monitored data
 - 2.2.2 Assessment against goals and indicators: How the evaluation / assessment is made against goals / indicators identified (if any) in the strategic / management plan
 - 2.3 Links between monitoring/assessment results and management
 - 2.3.1 Use of monitoring data: How it used for assessment, how monitoring results are followed up or reflected in the future plans / strategies
 - 2.3.2 Institutional aspects: Parties involved in the management of MPAs (implementation of plans, monitoring the implementation, etc.)
- 3. Feedback of assessment results to management plans and practices**
- 4. Case studies – monitoring and assessment results and corresponding measures in the selected MPA**

Outline 1.2 - 1.4

MPA Management policies, strategies, and plans

Monitoring and evaluation plan

Outline 3

Outline 2.3

Reflection of the assessment results in management and monitoring plans?

Outline 2.2

Monitoring parameters

Monitoring data

For example,

- Water quality
- Water temperature
- Population and habitat of target species (e.g., fish, sea birds, marine mammals)
- Tourism arrival
- Fishery data
- ...

Evaluation of data



Assessment of MPA

- Assessment criteria, e.g.,
- Maintenance of ecosystem
 - Biodiversity
 - balance of human activities (e.g., tourism, fisheries) and conservation
 - Understanding of climate change impact
 - ...

Assessment results

Outline 2.1

