

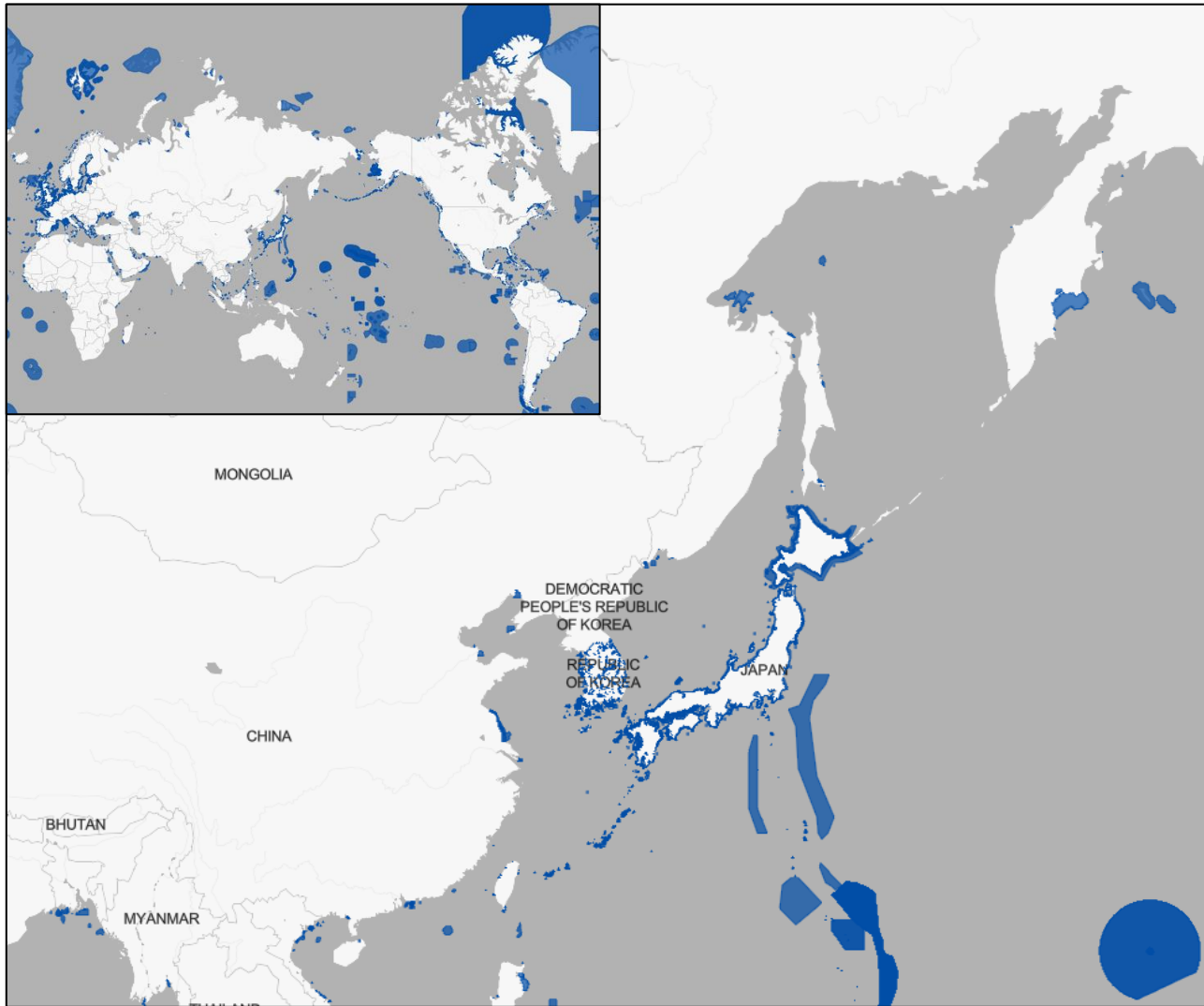


# An Extension of MPAs by World Heritage: a case of Getbol, Korean Tidal Flats

**Dr. Kyong-O, Moon**

Technical Advisor and Expert, RoK Delegation of the World Heritage Committee  
Former Secretary-General, World Heritage Promotion Team of Korean Tidal Flats

# Marine Protected Areas



MPAs in North-east Asia Region (source: World Database Protected Area)

## Protected Planet Report 2024

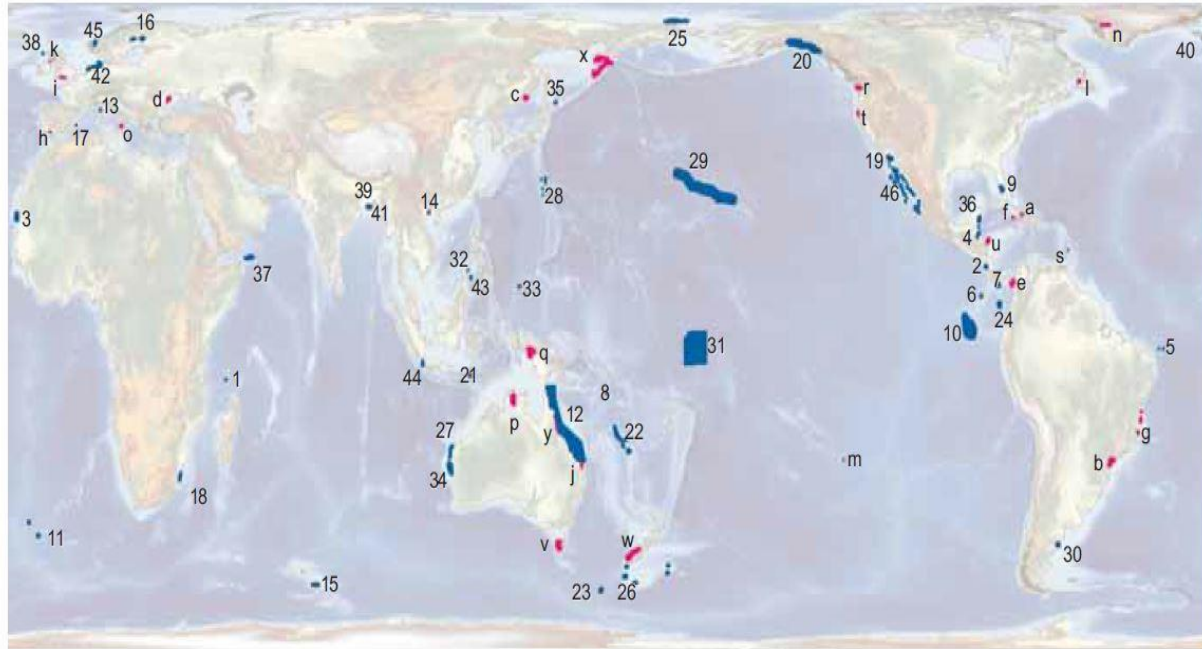
- Marine Protected Areas cover only **8.4%**
- Analysis using the MPA Guide reveals that **only 5.7% of the ocean is in MPAs that are either implemented** (operational with plans for management in place) and/or **actively managed**.
- **Only 2.8% of the ocean is in fully or highly protected MPAs** (i.e., areas where no or only light extractive activities are allowed that have low total impact).



# Marine and Coastal World Heritage Sites

## Natural and mixed WH sites with marine components

Source: Marine Natural Heritage and the World Heritage List (IUCN, 2013)

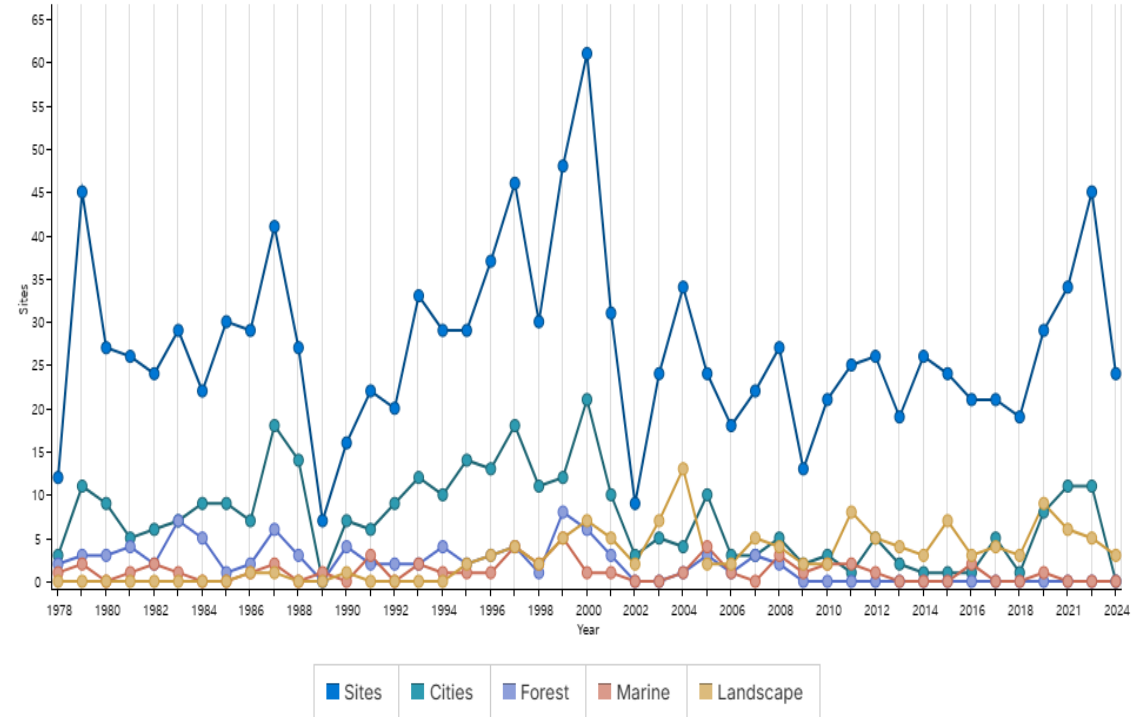


■ 46 natural World Heritage sites recognized for inscription in relation to marine values

■ 25 other natural World Heritage sites that include a marine component

## Number of WH properties inscribed each Year by themes

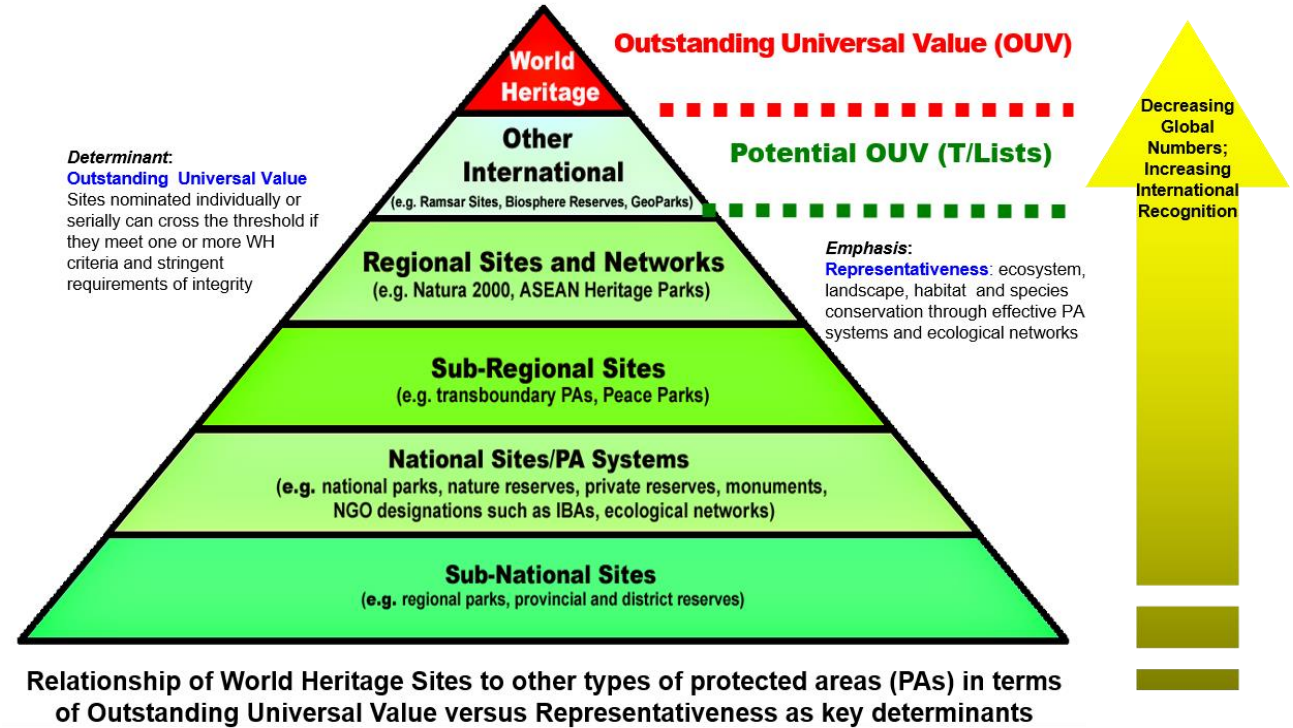
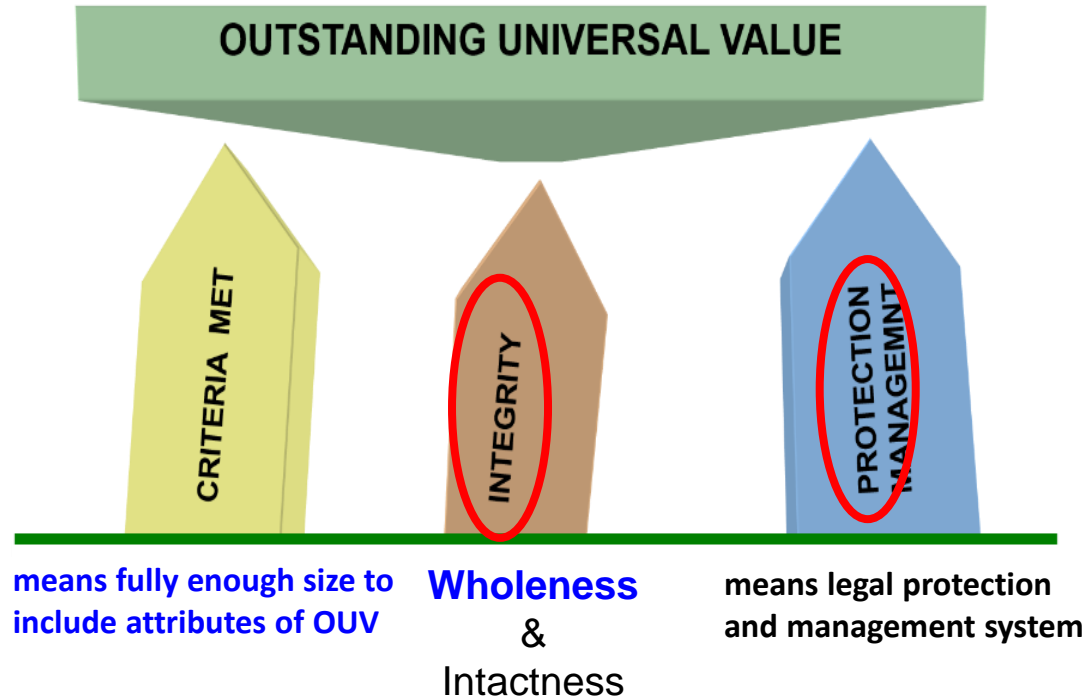
Source: World Heritage List Statistics (World Heritage Center, 2024)



- World Heritage related to marine values is in a gap on the World Heritage List.  
\* as of 2024, **only 49 marine WH sites (4%)** among 1,223 WH properties in total
- Marine and coastal areas are the lowest numbers on the World Heritage List.

**More possibility and/or opportunity to be on WH List to make a balance?**

# MPAs and World Heritage



- World Heritage can be one of **the most effective tool to enlarge MPAs** since WH has to meet the **requirement of Integrity and Protection & Management**.
- To take a crown called “World Heritage” means to have **the highest brand** in the world.



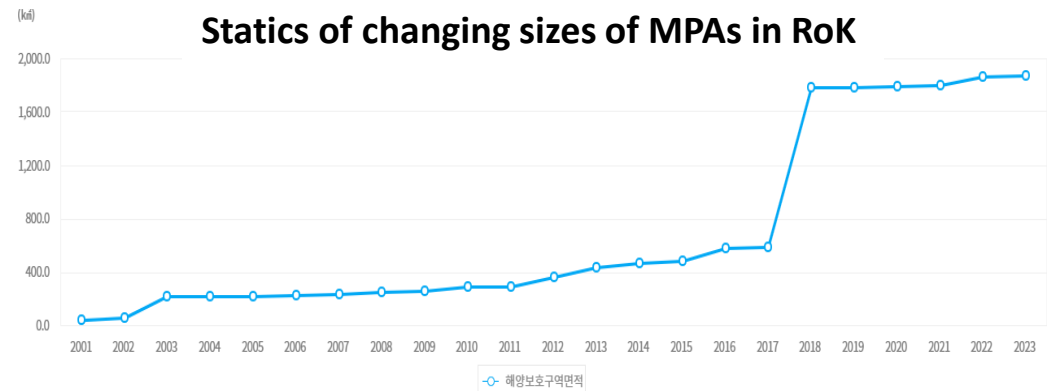
# Extension of MPAs during WH Nomination Process



## Extended Sizes of MPAs by WH

Sites	Existed (ha)	Extended (ha)	Increased (ha)
Seocheon	1,530	6,809	5,279
Gochang	1,040	6,466	5,426
Shinan	4,362	110,086	105,724
Boseong	1,030	3,185	2,155
Suncheon	2,800	2,800	-
<b>Total</b>	<b>11,022</b>	<b>129,346</b>	<b>118,584</b>

↓  
Apprx. 90% of MPAs in RoK



# Comparison between the Wadden Sea and the Yellow Sea

The Wadden Sea	Items	The Yellow Sea* <small>* IUCN Report (2012, 2023) IUCN Evaluation of WH (2019, 2021)</small>
Low	Fishing Intensity	High
Preventing from storm (natural-based solution / maintaining tidal flat areas)	Purpose of Reclamation (method / results)	Securing land area (artificial development / loss of tidal flat areas)
Undisturbed	Coastal Ecosystem	Disturbed
Transboundary property (Face)	Results (Property Area)	Serial property (Spots)



# Suggestion to Extend MPAs in the Yellow Sea

## Making up the Yellow Sea MPA Belt



## The Yellow Sea MPA Belt

- Protection of remained coastal area by using UNESCO Brands (Multi International Designated Areas, MIDAs)
- Making up the **Yellow Sea MPA Belt (YSMBelt)**, combining with national-level MPAs

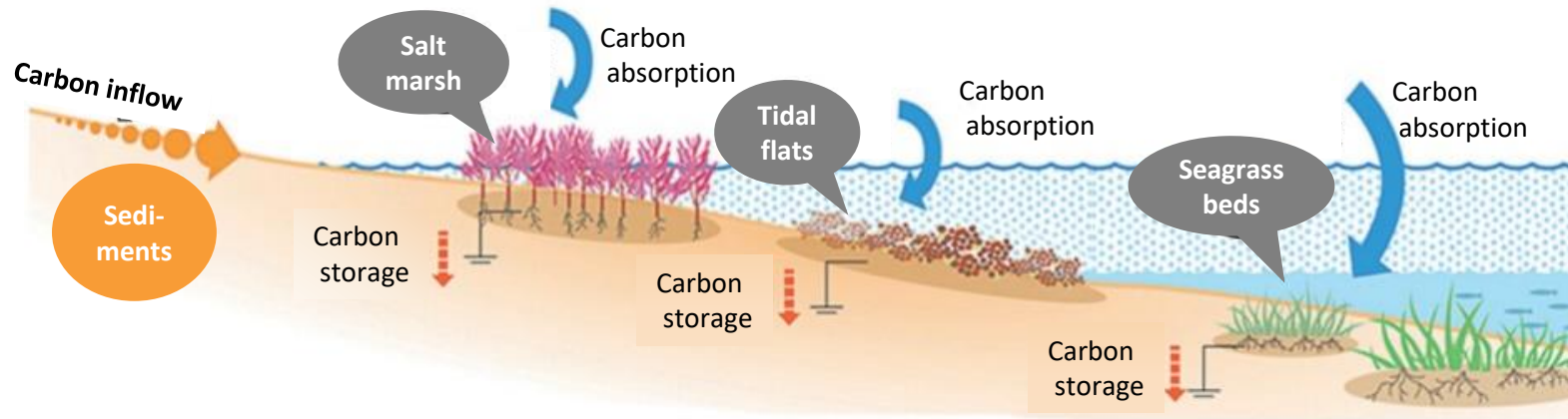
## Roles of NEAMPAN

- Enhancing cooperation with international organization like UNESCO and IUCN
- Encouraging participation of each nation's MPAs to NEAMPAN
- Sharing experience and information like best practices

# Contribution of MPAs to the Climate Change

- **Tidal Flats as a blue carbon** \* published in *Science of the Total Environment* (July, 2021)

([The first national scale evaluation of organic carbon stocks and sequestration rates of coastal sediments along the West Sea, South Sea, and East Sea of South Korea – ScienceDirect](#))



- **Marine ecosystem** are known to absorb soil carbon up to **50 times faster** than terrestrial ecosystems.
- **Tidal flats** provide habitats for mangrove and seagrass, which occupy only **0.5% of marine area** but take a role to absorb **50~70% of carbon** in the whole marine area.
- Tidal flats in RoK (248,000 ha) 1.3 mil. tons (110,000 cars)/yr.

The function of tidal flats as a carbon sink, and the extension of MPAs in Northeast Asia, especially the Yellow Sea, and cooperation between countries can be good ways to respond to climate change.





Thank you