Japan's approach to scientifically promote the establishment of protected areas

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Establishment of protected areas

- increase the areas
- conserve areas of particular importance for biodiversity

Terrestrial and coast

Comprehensive survey on national and quasi-national parks (2007–2010)

Marine

Selection of important marine areas (2011–2013)

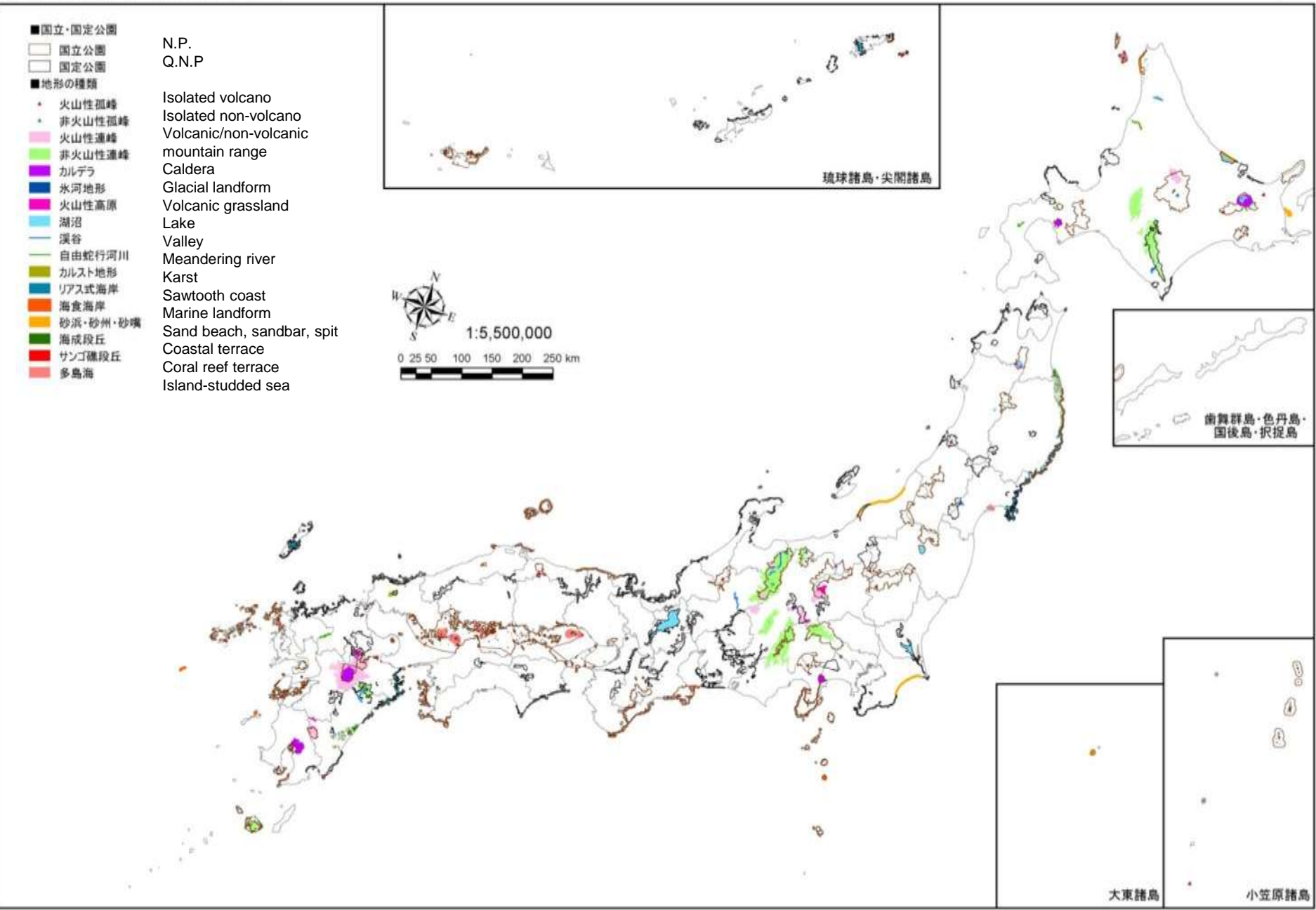# Comprehensive survey on national and quasi-national parks (2007-2010)

- National Park: Designated and managed by MOE
- Quasi-national Park: Designated by MOE, managed by prefectures
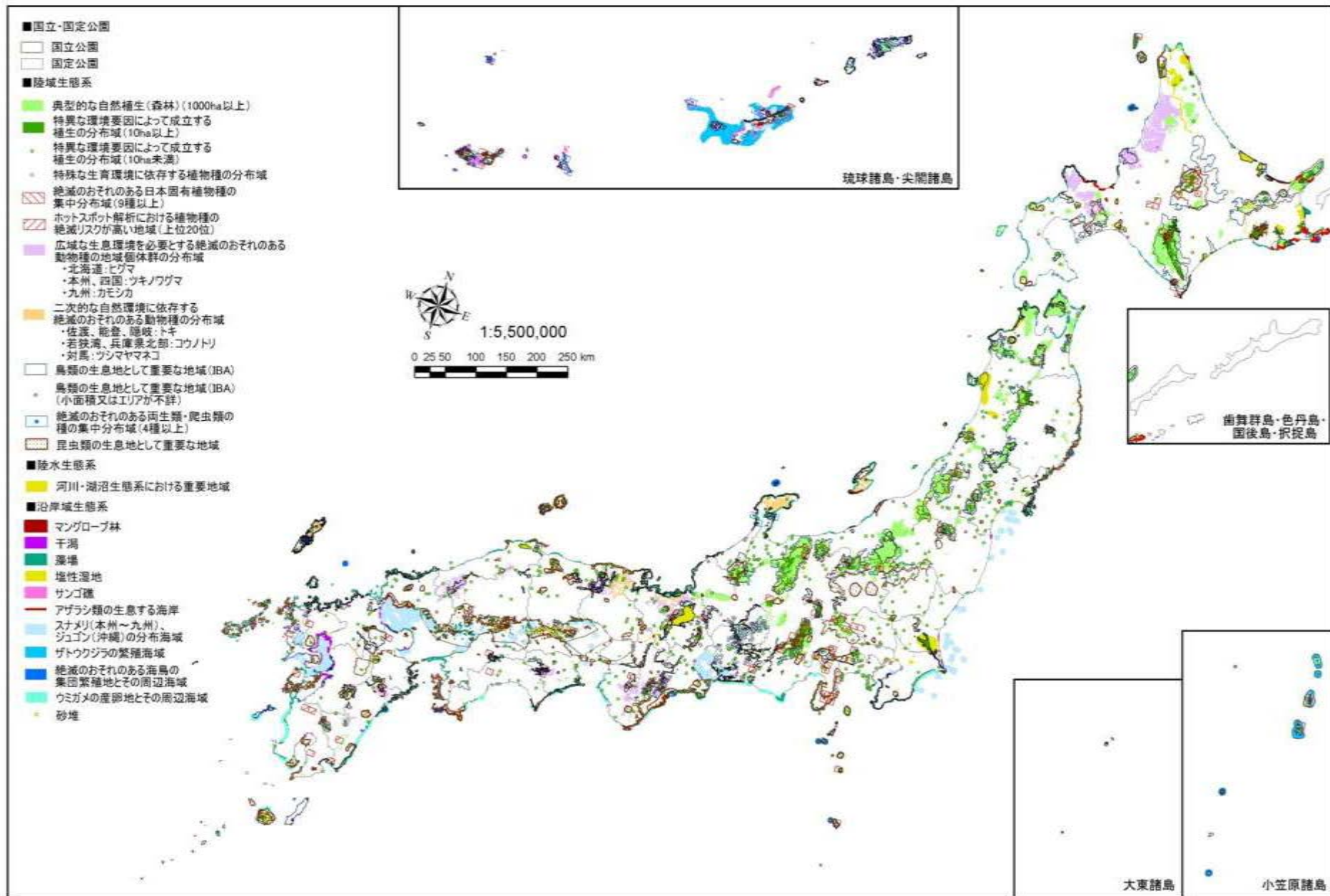

Crater of Mt. Zao

Comprehensive survey on national and quasi-national parks (2007-2010)

1. Background: changes in natural environment and social conditions since designation

2. Focus on terrestrial and coastal areas

3. Selection of important areas in terms of natural environment (ecological and geological characteristics)

4. Gap analysis between the selected areas and the existing national and quasi-national parks

5. Selection of 18 candidate sites for new designation and large-scale expansion

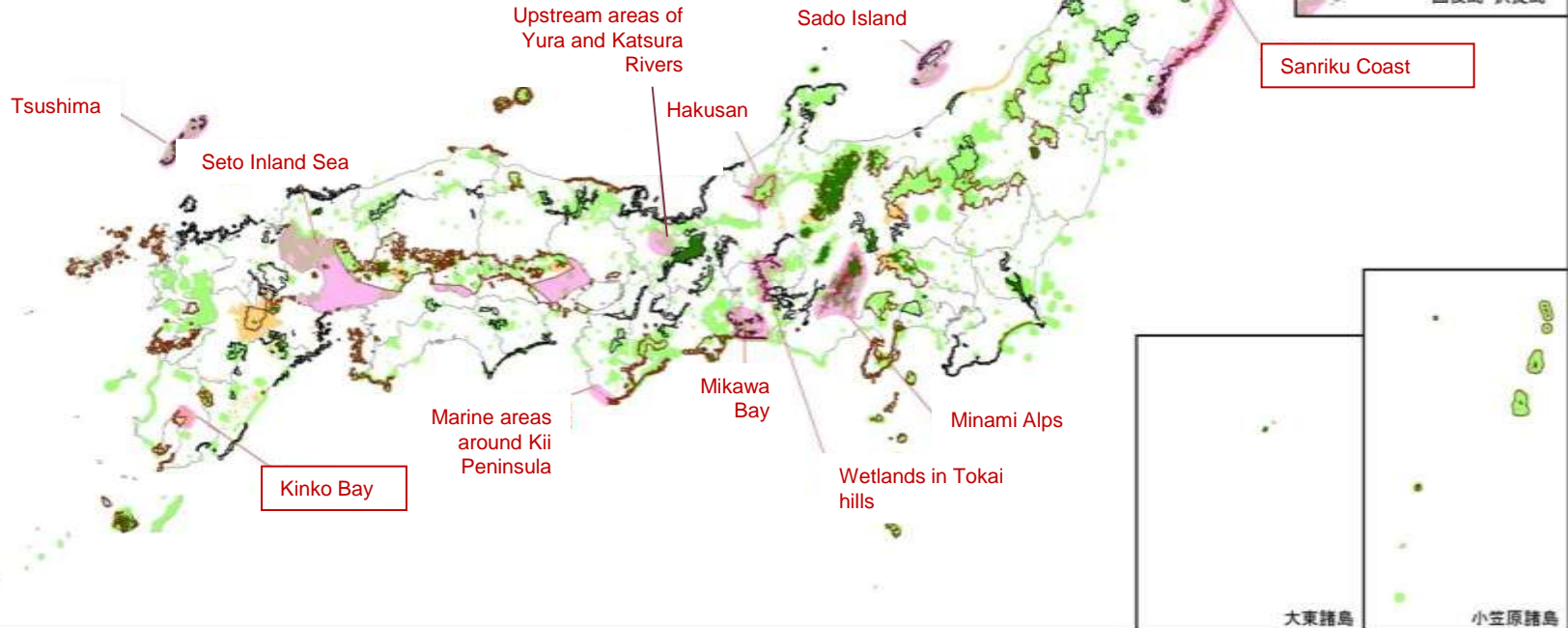# Important areas in terms of geographic characteristics

Legend:

■国立・国定公園
- 国立公園　N.P.
- 国定公園　Q.N.P

■地形の種類
- 火山性孤峰　Isolated volcano
- 非火山性孤峰　Isolated non-volcano
- 火山性連峰　Volcanic/non-volcanic mountain range
- 非火山性連峰
- カルデラ　Caldera
- 氷河地形　Glacial landform
- 火山性高原　Volcanic grassland
- 湖沼　Lake
- 渓谷　Valley
- 自由蛇行河川　Meandering river
- カルスト地形　Karst
- リアス式海岸　Sawtooth coast
- 海食海岸　Marine landform
- 砂浜・砂州・砂嘴　Sand beach, sandbar, spit
- 海成段丘　Coastal terrace
- サンゴ礁段丘　Coral reef terrace
- 多島海　Island-studded sea

1:5,500,000

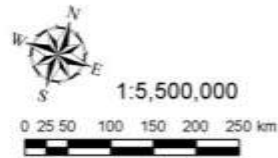0 25 50　100　150　200　250 km

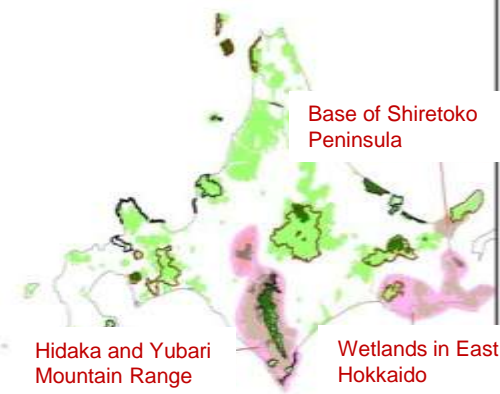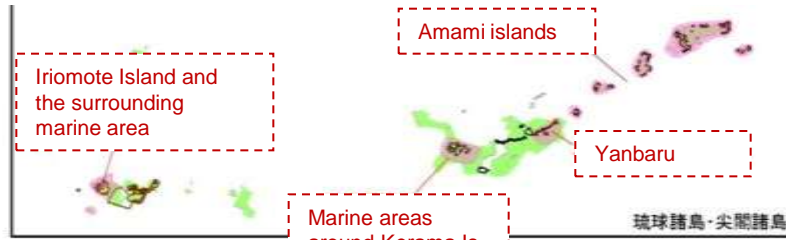琉球諸島・尖閣諸島

歯舞群島・色丹島・国後島・択捉島

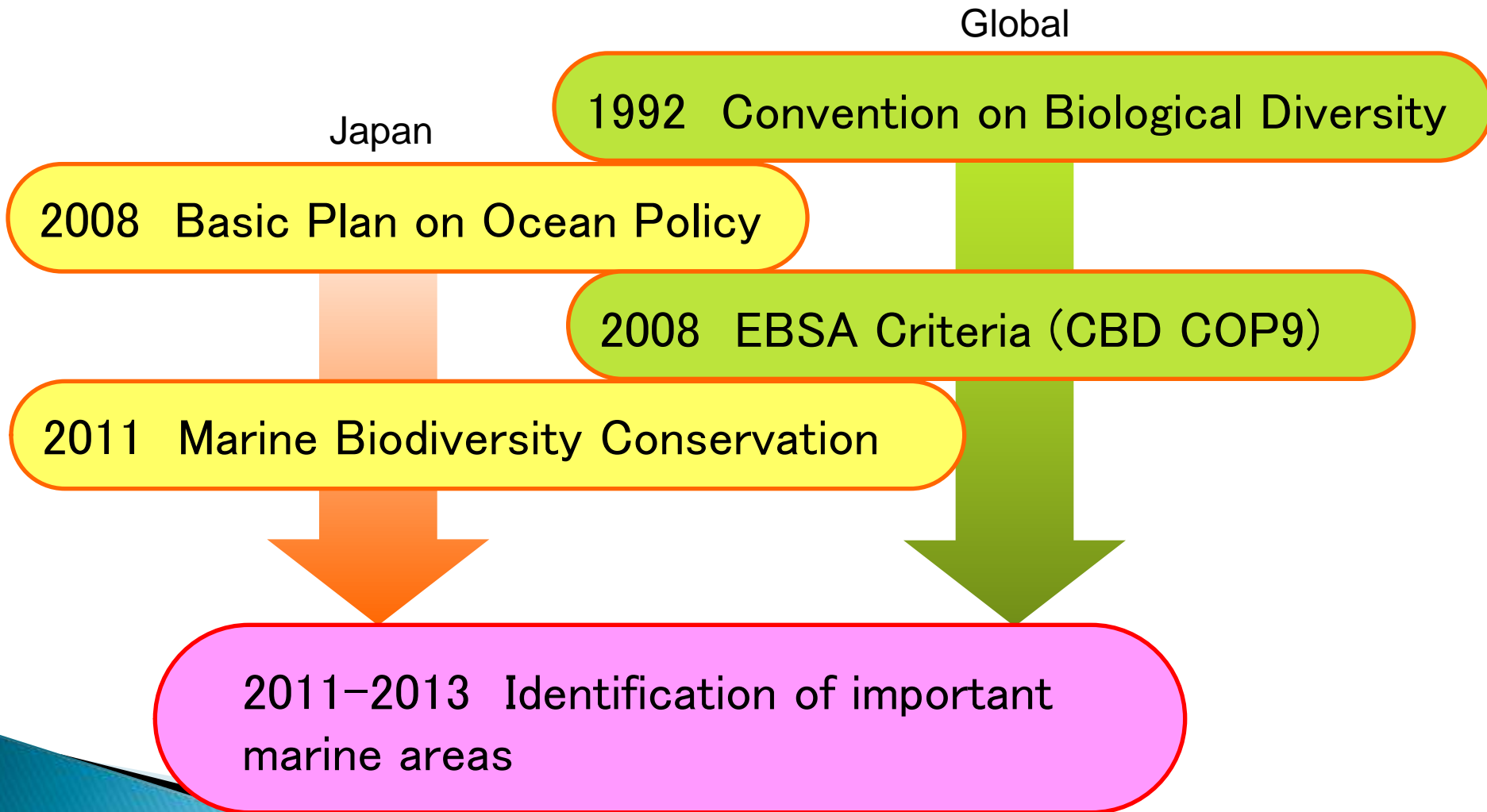大東諸島　小笠原諸島

Important areas in terms of ecological characteristics

18 candidate sites for new designation and large-scale expansion of national and quasi-national parks

国立・国定公園
国立公園
国定公園
重要地域
生態系の観点から重要な地域
地形地質の観点から重要な地域
重複部分
新規指定・大規模拡張候補地

1:5,500,000
0 25 50 100 150 200 250 km

Amami islands

Iriomote Island and the surrounding marine area

Yanbaru

Base of Shiretoko Peninsula

Marine areas around Kerama Is.

琉球諸島・尖閣諸島

Hidaka and Yubari Mountain Range

Wetlands in East Hokkaido

歯舞群島・色丹島・国後島・択捉島

Upstream areas of Yura and Katsura Rivers

Sado Island

Sanriku Coast

Tsushima

Hakusan

Seto Inland Sea

Mikawa Bay

Minami Alps

Marine areas around Kii Peninsula

Wetlands in Tokai hills

Kinko Bay

大東諸島

小笠原諸島

*候補地名は仮称である。
*図示してある候補地の範囲は概念的なものであり、具体的な公園区域と一致するものではない。

Selection of important marine areas (2011–2013)

Global

Japan

1992　Convention on Biological Diversity

2008　Basic Plan on Ocean Policy

2008　EBSA Criteria (CBD COP9)

2011　Marine Biodiversity Conservation

2011–2013　Identification of important marine areas

Intended use

▶ Enhancement of Marine Protected Areas and networking thereof

▶ Adaptation to the predicted effects of climate change

▶ Appropriate management and environmental consideration in open ocean

▶ Promotion of public awareness and involvement of various actors

Criteria

	EBSA Criteria (UNEP/CBD/COP/DEC/IX/20)
1	Uniqueness or rarity
2	Special importance for life-history stages of species
3	Importance for threatened, endangered or declining species and/or habitats
4	Vulnerability, fragility, sensitivity, or slow recovery
5	Biological productivity
6	Biological diversity
7	Naturalness
	Additional criterion
8	Representativeness or Typicality Area containing representative or typical feature of ecosystem and/or biotic community of Japan

GIS data applied in each criteria

Biological data

Distribution data
   Marine Mammals
   Birds
   Turtles/Sea snakes
   Fish
   Cnidaria/Mollusca/Others
   Deep Sea Corals
   Chemosynthetic community
Red List Species
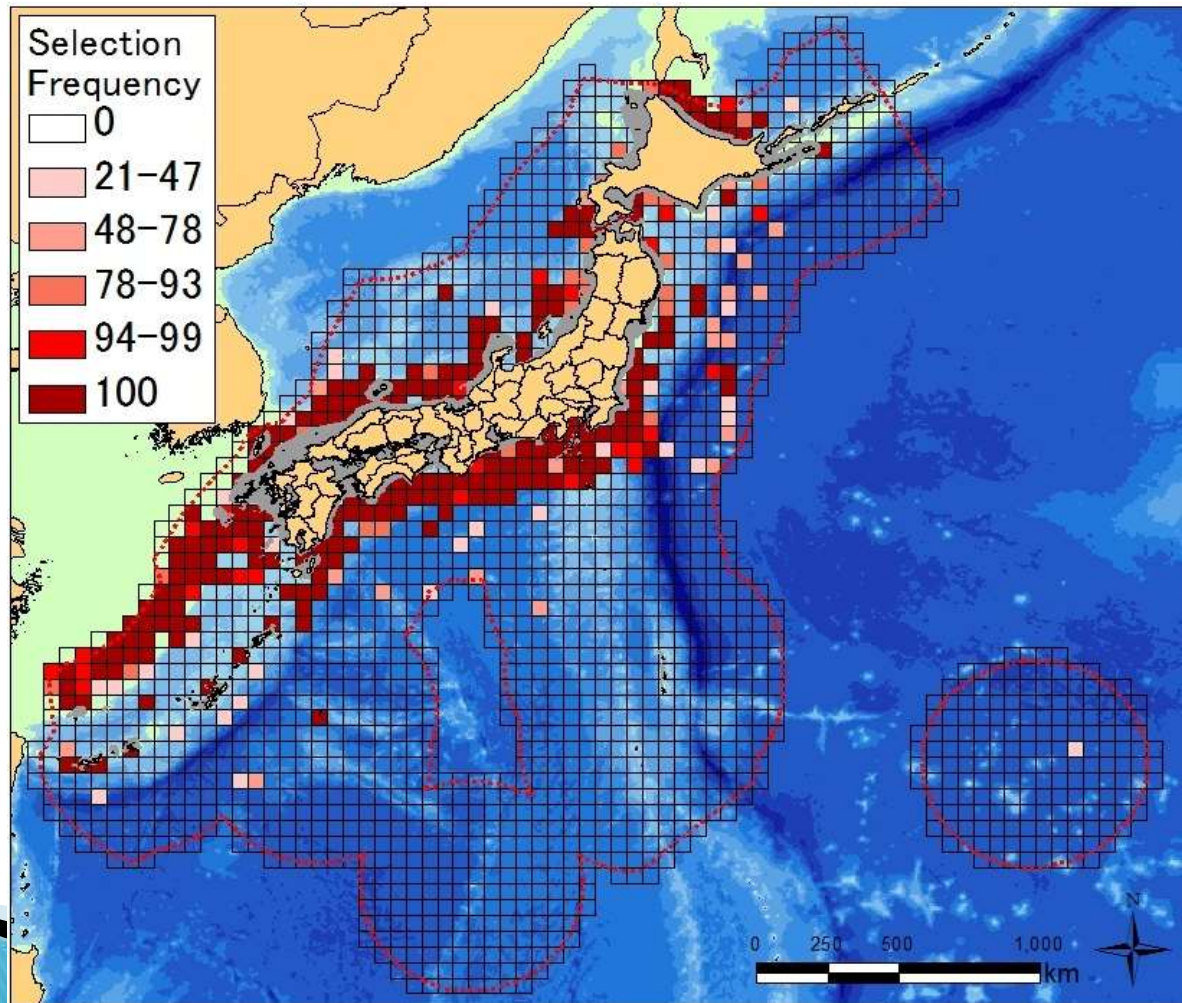IBA, Marine IBA
National monument

etc.

Physical data

Bathymetry
Chlorophyll a concentration
Distribution of canyons
Front and upwelling current
M2 Hamitade
Ocean current
Sea Ice
Sand bank
Seamount Locations
Trench
Hydrothermal vents and seeps

etc.

Sample result of analysis

MARXAN solution in open ocean (epipelagic open ocean)

Thank you