

*Presented at the FIG e-Working Week 2021,
21-25 June 2021 in Virtually in the Netherlands*

Maps as measurement

Marine protected areas and global conservation targets

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Representing ocean space



BLUE ECONOMY

The Blue Economy is sustainable use of ocean resources for economic growth, improved livelihoods and jobs, and ocean ecosystem health.

The Blue Economy encompasses many activities...

RENEWABLE ENERGY

Sustainable marine energy can play a vital role in social and economic development.

FISHERIES

Marine fisheries contribute more than **US\$270 billion** annually to global GDP. More sustainable fisheries can generate more revenue, more fish and help restore fish stocks.

MARITIME TRANSPORT

Over **80% of international goods** traded are transported by sea, and the volume of seaborne trade is expected to double by 2030 and quadruple by 2050.

TOURISM

Ocean and coastal tourism can bring jobs and economic growth. Coastal Least Developed Countries and Small Island Developing States receive more than **41 million visitors** per year.

CLIMATE CHANGE

The impacts of climate change on oceans—rising sea-levels, coastal erosion, changing ocean current patterns, and acidification—are staggering. At the same time, **oceans are an important carbon sink** and help mitigate climate change.

WASTE MANAGEMENT

80% of litter in the ocean is from land-based sources. Better waste management on land can help oceans recover.

Maps as productive of space

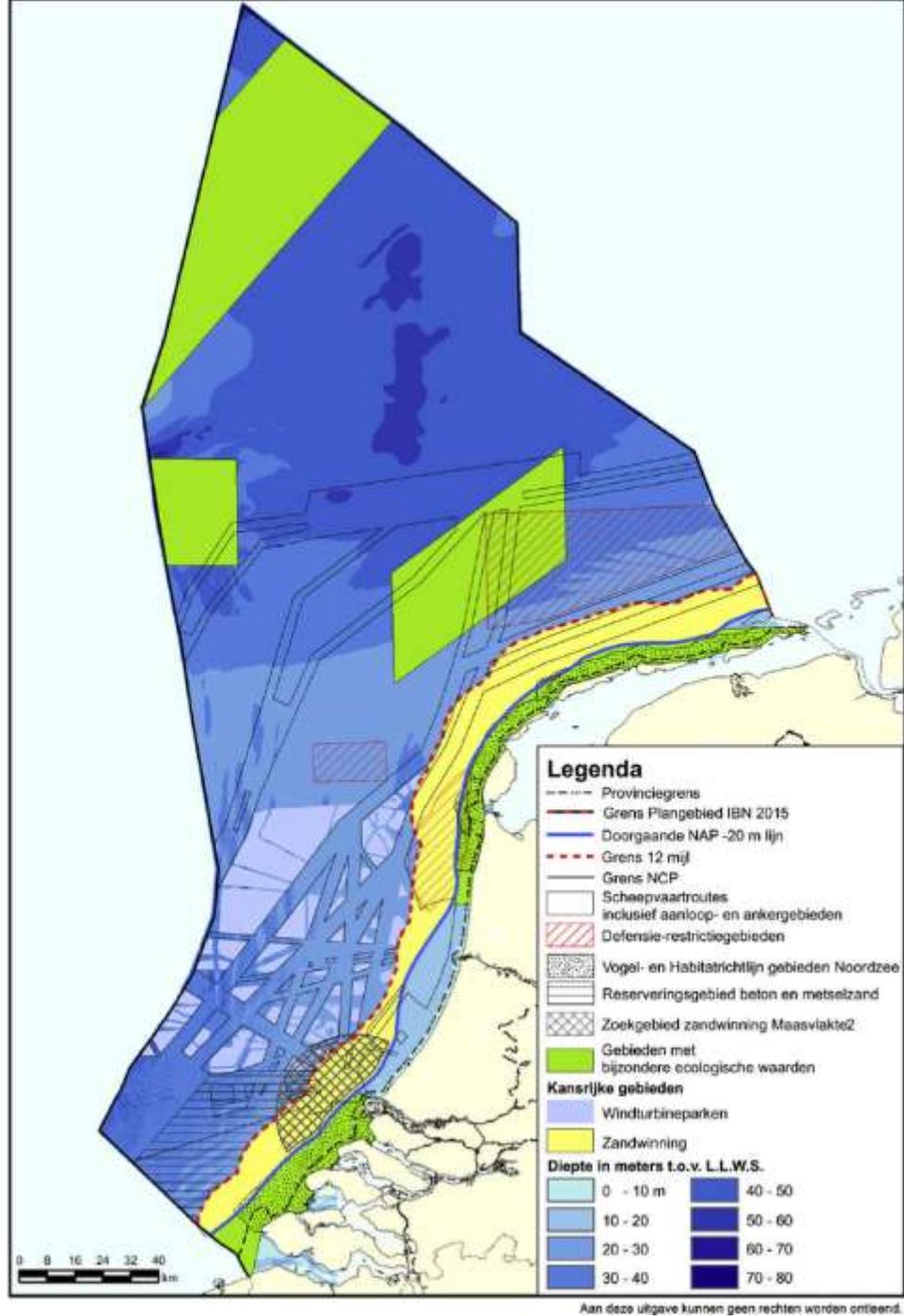
In representing, maps simultaneously “provide the very conditions of possibility for the worlds we inhabit and the subjects we become.”

Pickles 2004, 5

Source: en.m.wikipedia.org/wiki/File:Netherlands_location_map.svg



Source: Rijkswaterstaat Noordzee, 2005.



Maps as the measure of conservation

Because metrological practices define what warrants measurement, they “do no just reflect reality as it is. They create new realities (calculable objects).”

Barry and Slater, 2002, 30

Governing by goals

MILLENNIUM DEVELOPMENT GOALS

-  **End Poverty and Hunger**
-  **Universal Education**
-  **Gender Equality**
-  **Child Health**
-  **Maternal Health**
-  **Combat HIV/AIDS**
-  **Environmental Sustainability**
-  **Global Partnership**

SUSTAINABLE DEVELOPMENT GOALS



A grid of 17 Sustainable Development Goals (SDGs) icons, each with a number and a brief description:

- 1 NO POVERTY
- 2 ZERO HUNGER
- 3 GOOD HEALTH AND WELL-BEING
- 4 QUALITY EDUCATION
- 5 GENDER EQUALITY
- 6 CLEAN WATER AND SANITATION
- 7 AFFORDABLE AND CLEAN ENERGY
- 8 DECENT WORK AND ECONOMIC GROWTH
- 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
- 10 REDUCED INEQUALITIES
- 11 SUSTAINABLE CITIES AND COMMUNITIES
- 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
- 13 CLIMATE ACTION
- 14 LIFE BELOW WATER
- 15 LIFE ON LAND
- 16 PEACE, JUSTICE AND STRONG INSTITUTIONS
- 17 PARTNERSHIPS FOR THE GOALS



A grid of 20 Aichi Targets icons, each with a number and a brief description:

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20

AICHI TARGETS



Specific

Do: Set real numbers with real deadlines.

Don't: Say, "I want more visitors."



Measurable

Do: Make sure your goal is trackable.

Don't: Hide behind buzzwords like, "brand engagement," or, "social influence."



Attainable

Do: Work towards a goal that is challenging, but possible.

Don't: Try to take over the world in one night.



Realistic

Do: Be honest with yourself- you know what you and your team are capable of.

Don't: Forget any hurdles you may have to overcome.



Time-bound

Do: Give yourself a deadline.

Don't: Keep pushing towards a goal you might hit, "some day."

Marine Protected Areas Targets

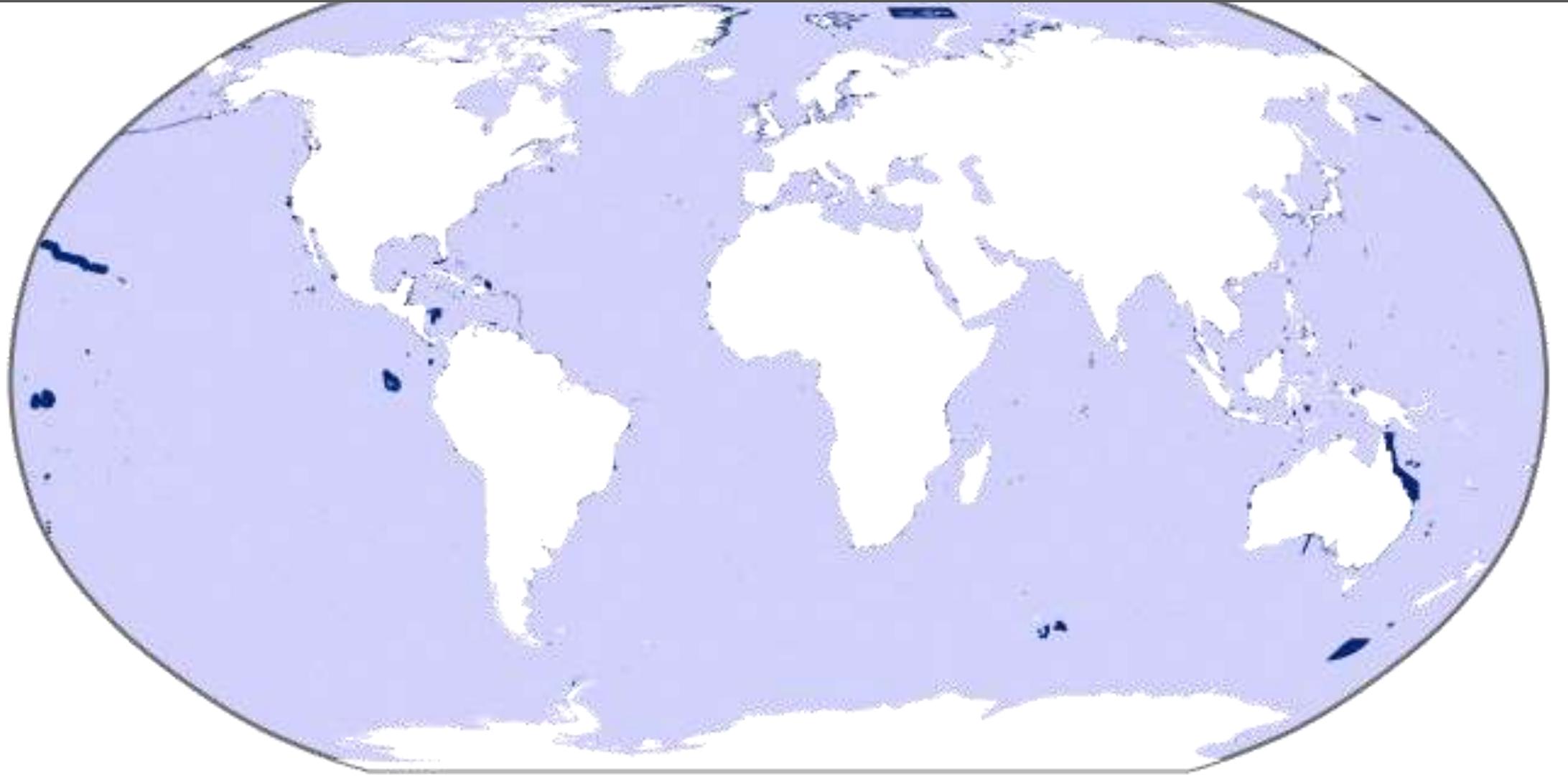


14.5 - By 2030, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information

Indicator:

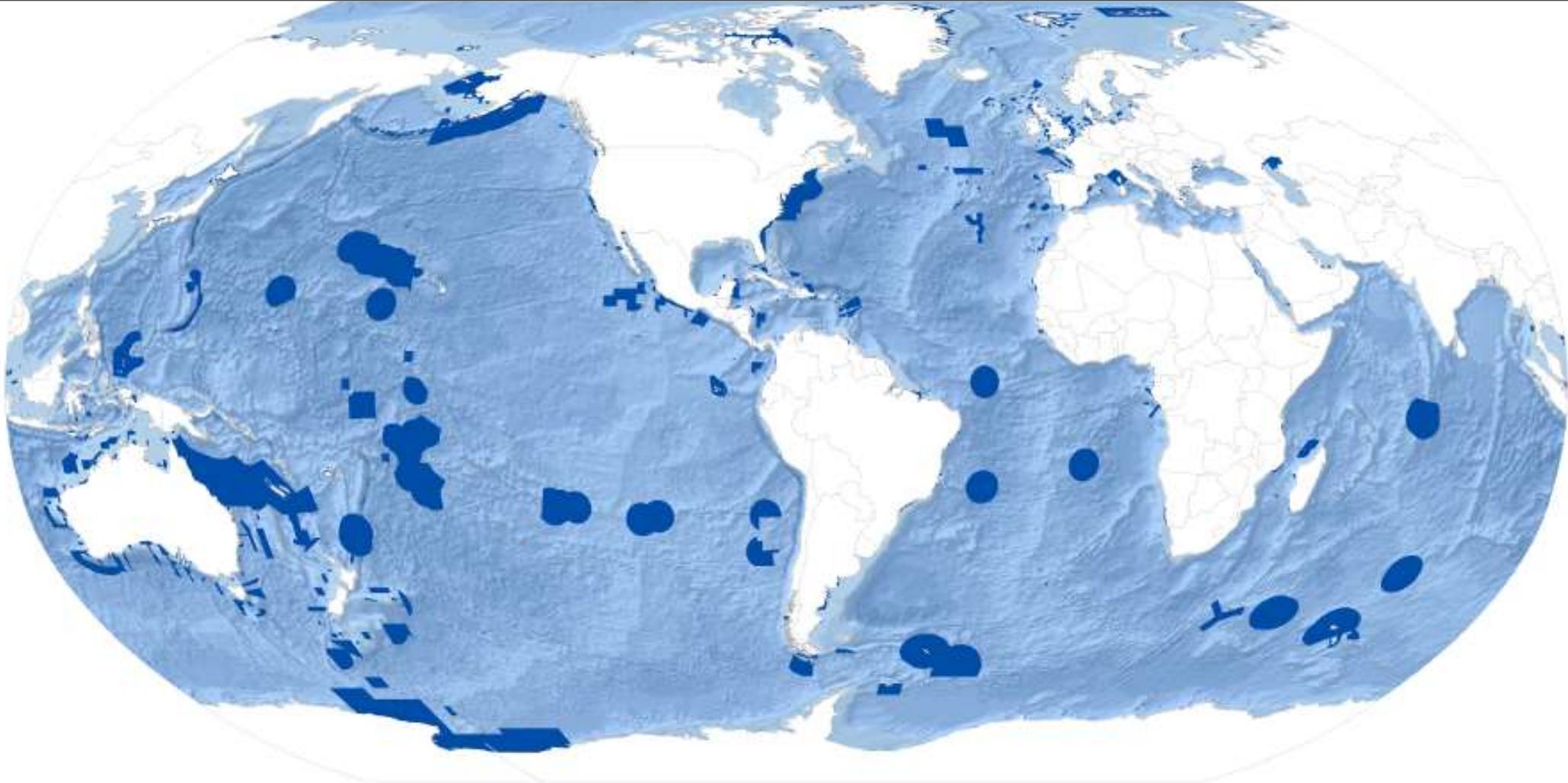
14.5.1 - Coverage of protected areas in relation to marine areas

Marine Protected Areas



2008

Marine Protected Areas



Source: UNEP-WCMC and IUCN (2019). Protected Planet: The World Database on Protected Areas (WDPA) [On-line].
May 2019, Cambridge, UK: UNEP-WCMC. Available at www.protectedplanet.net

2019



UN Biodiversity ✓ @UNBiodiversity · May 19



#BREAKING: The world has met **#AichiTarget11** on **#ProtectedAreas**.

The new **#ProtectedPlanet** report shows that we must focus on improving the quality of existing and new protected and conserved areas to benefit **#nature** and people.

Full report: bit.ly/2RjLnMz





PROTECTED AREAS

By 2020, at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascape.

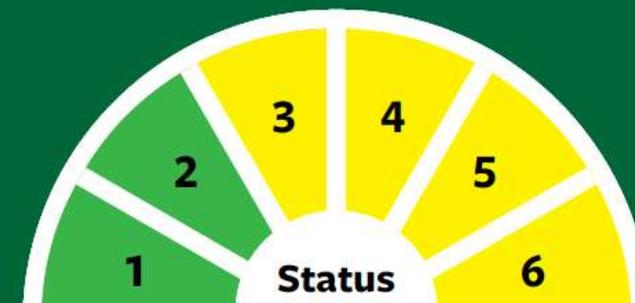


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TARGET ELEMENTS

1. 17% of terrestrial and inland water areas conserved
2. 10% of coastal and marine areas conserved
3. Areas of particular importance conserved
4. Protected areas are effectively and equitably managed
5. Protected areas are ecologically representative
6. Protected areas are well connected and integrated



Marine Protected Areas Targets



Convention on
Biological Diversity

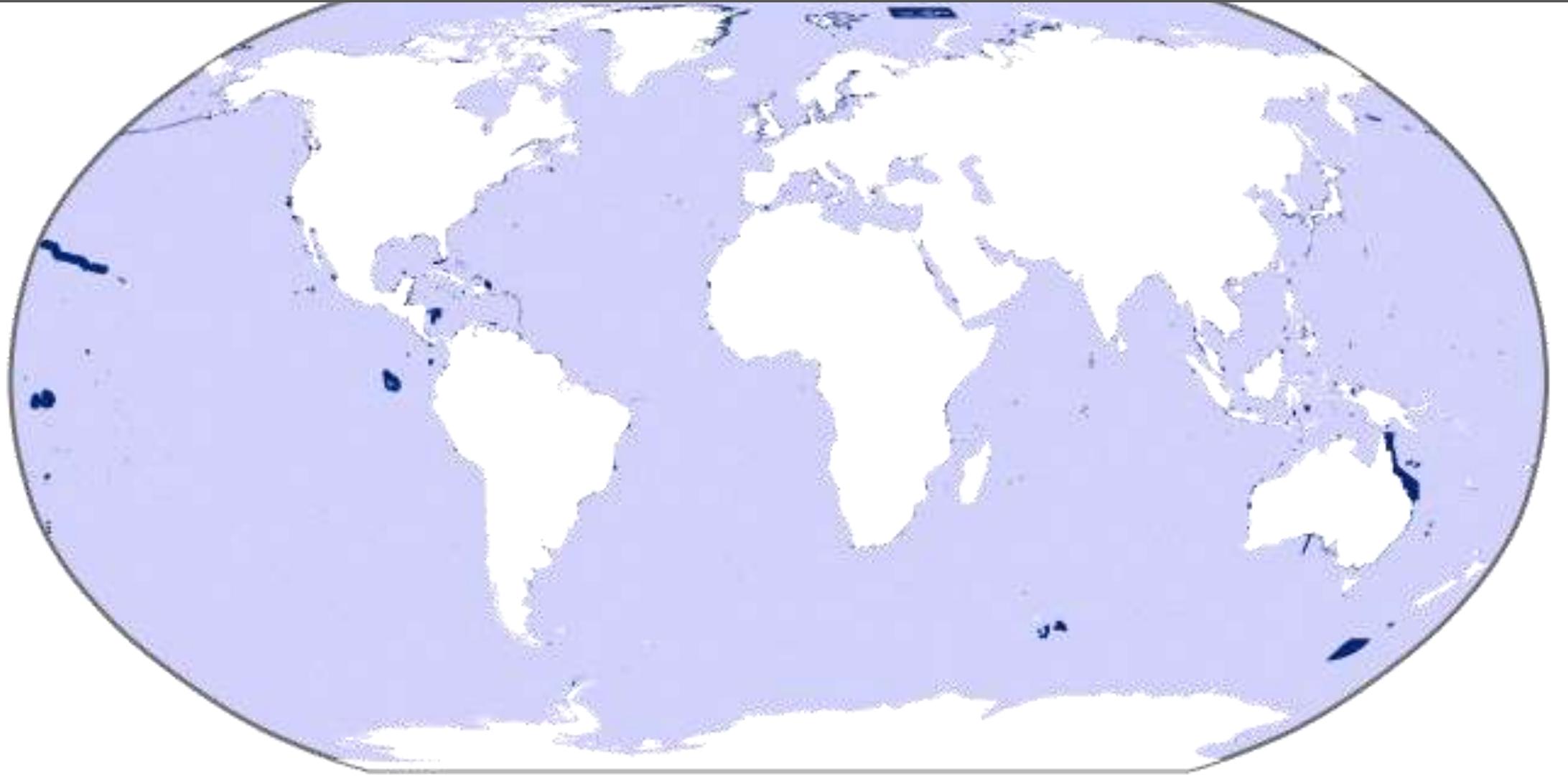


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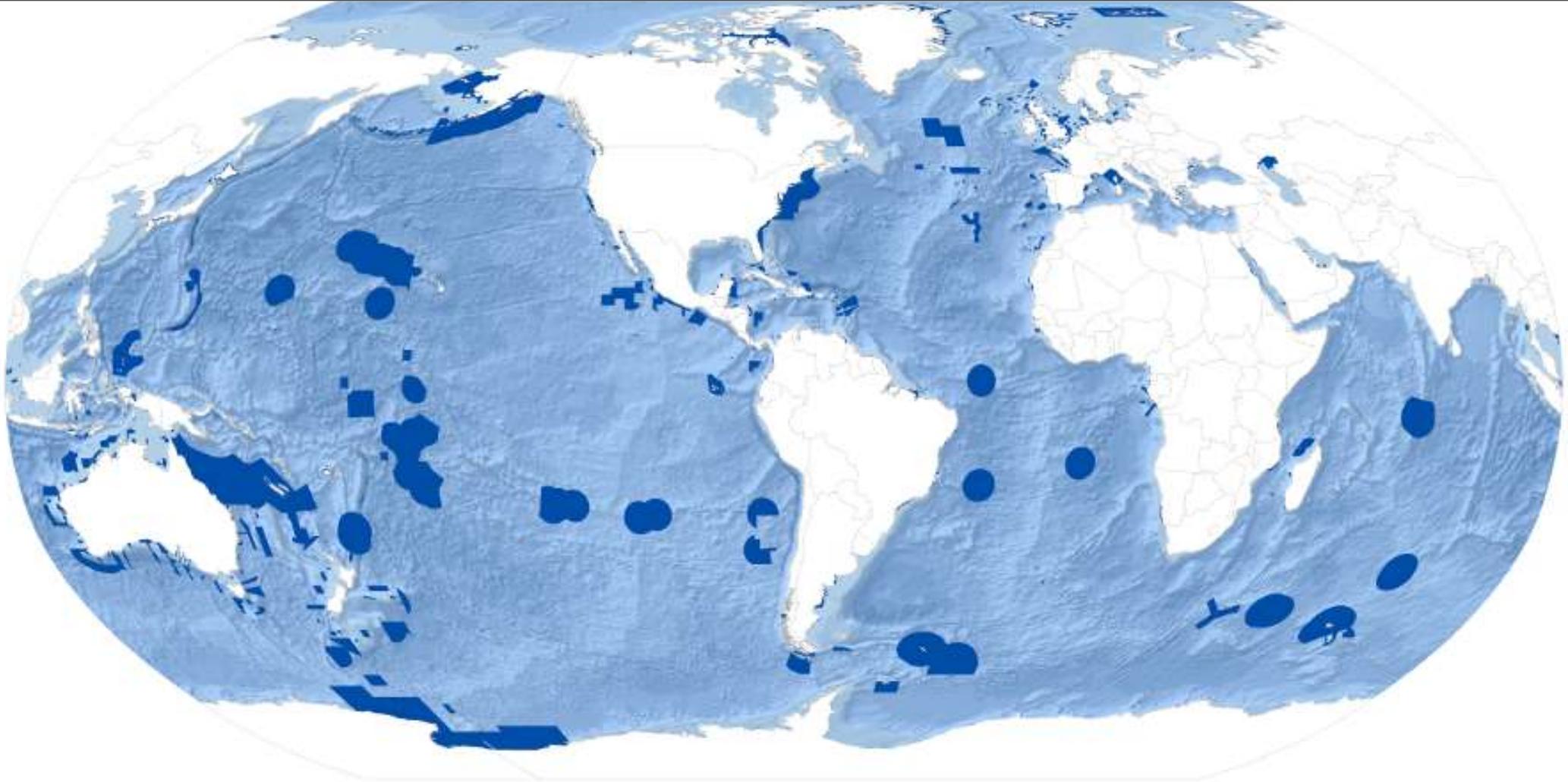
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Less Successful Elements in Aichi Target 11

Element 4 - Protected Areas are effectively and equitable managed

For effective:

- Failure to measure
- Ineffective management

For equity:

- Lack of measurability

The Next Protected Areas Target?



#Love30x30

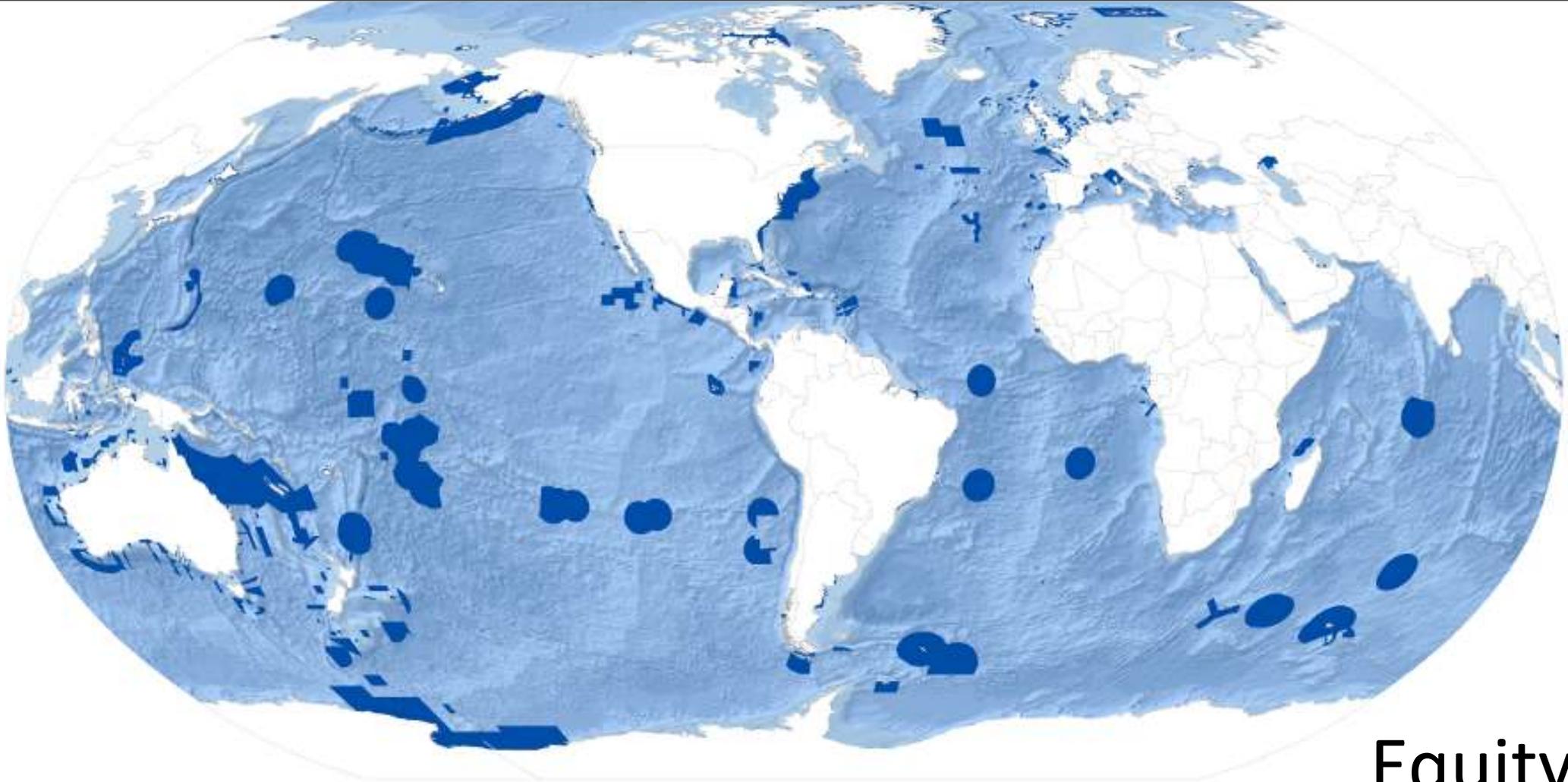
<https://www.oceanunite.org/30-x-30/>

ZERO DRAFT of the Post 2020 Agenda for the CBD

*Target 2. By 2030, protect and conserve through well connected and effective system of protected areas and other effective area-based conservation measures at least **30 per cent** of the planet with the focus on areas particularly important for biodiversity.*

Equity?

The Limits of Maps as Measurement



Source: UNEP-WCMC and IUCN (2019). Protected Planet: The World Database on Protected Areas (WDPA) [On-line].
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Equity?