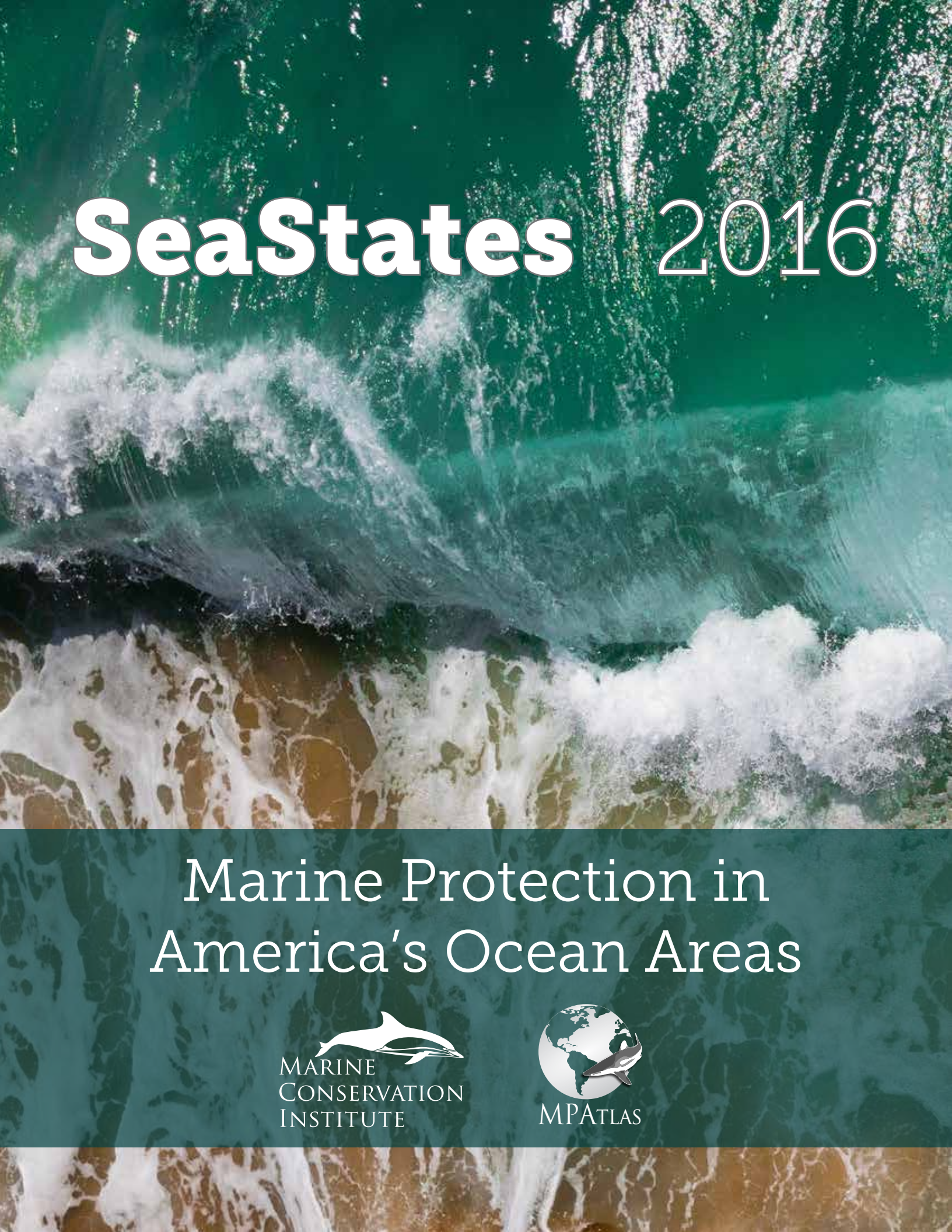


SeaStates 2016

Marine Protection in America's Ocean Areas

Marine Conservation Institute

MPAtlas

Oceans are essential to human survival and prosperity, yet our activities are pushing many critical marine species toward extinction. Marine biologists suggest that the best way to maintain the oceans' diversity, abundance and resilience is to protect marine life in their ecosystems, especially in marine protected areas (MPAs) that minimize extractive activities such as fishing, mining and oil and gas development. While many coastal states and territories have established marine protected areas, these zones are often temporary and/or offer limited protection from bottom trawling and other detrimental activities, providing few long-term conservation benefits to marine life and people. Studies show that no-take marine reserves are the most effective type of protected areas[1]. The benefits of marine protected areas increase when they are larger, more isolated, eliminate fishing, effectively enforced, and established for ten or more years[2].

However, numerous "MPAs" lack many, if not all, of these safeguards critical to ensuring the resilience of our ocean ecosystems. No-take marine reserves, in contrast, prohibit all extractive activities and deliver the conservation benefits that marine life need to thrive. Protecting biodiversity in marine reserves increases the abundance and diversity of marine life exported to surrounding areas, both securing food resources for millions of people and preventing loss of species. In this report we group these fully protected no-take marine reserves with several large and isolated MPAs that permit recreational fishing at insignificant levels, calling this group "strongly protected MPAs".

Strongly Protected MPAs

Areas where commercial extraction is prohibited, recreational extraction is by permit, carefully managed and highly restrictive, and subsistence use is minimal. As of this report, the term has been used only to describe a few large, remote MPAs where the impact of recreational use by permit is minimal due to the isolated location, size and management structure of the MPA.

SeaStates is a rigorous, quantitative account of strongly protected MPAs in the waters of US coastal states and territories updated annually by the team at MPAtlas.org. First published in 2013, our annual reports are intended to be a tool to measure and evaluate the progress towards effective marine protection in US waters.

Our Findings

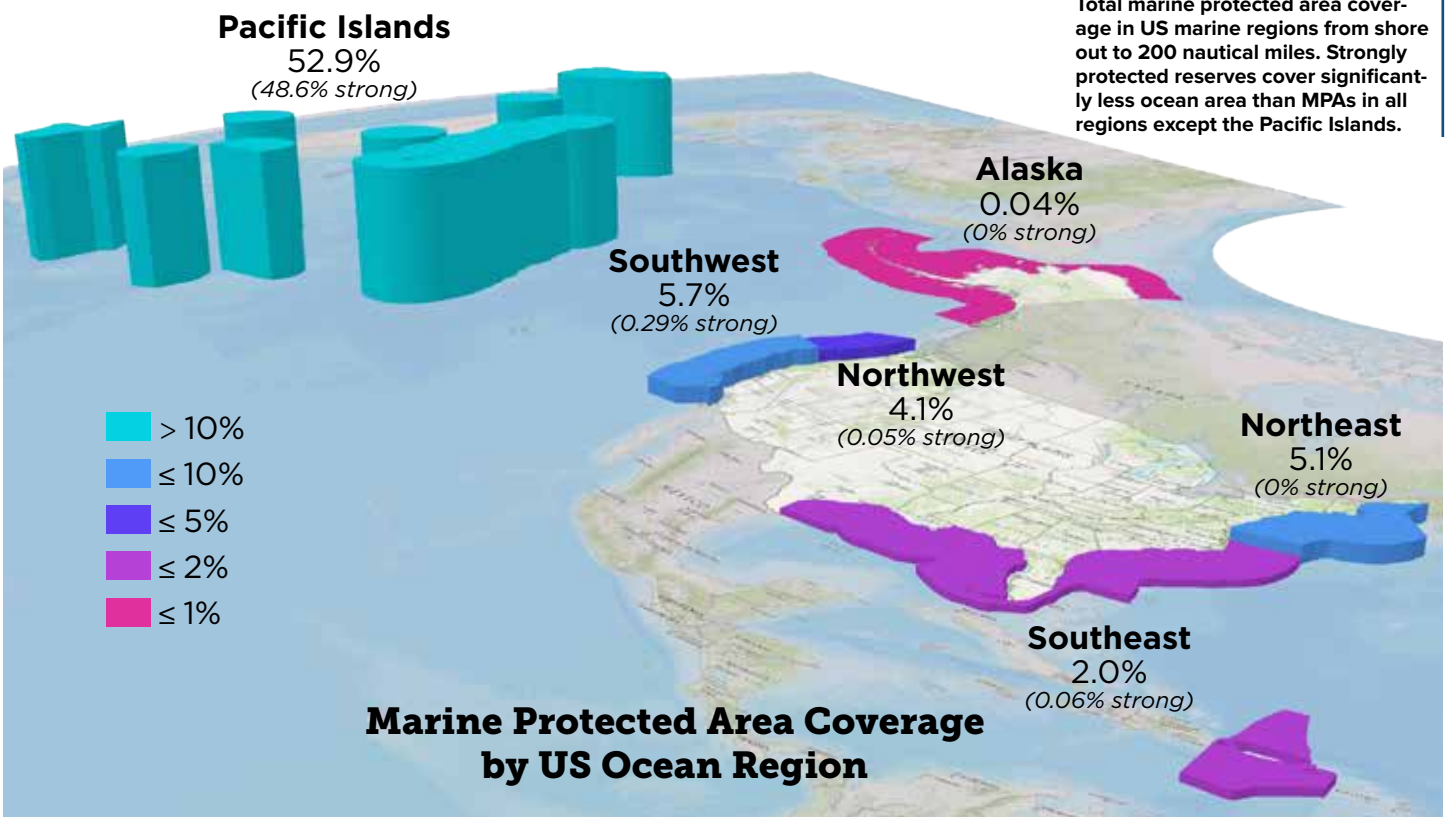
Currently the US strongly protects 23.2% of its entire ocean. US states and territories have 1.4% of their waters (from shore out to 3 nautical miles) in strongly protected MPAs while remaining federal waters out to 200nm strongly protect 23.9% of this area.

There has been significant conservation progress in US waters. Most of this has been achieved in our remote, tropical and sub-tropical Pacific waters, while securing strong marine protection for coastal waters of the continental US remains slow. If the Pacific Islands are removed from the analysis, our findings reveal that only 0.6% of state waters and 0.01% of federal waters are in strongly protected MPAs. The recent designation of the first marine national monument in Atlantic waters is a historic development and crucial step in the right direction.

Marine Protection in 2016

The greatest coverage of strongly protected areas occurs in the waters of Hawaii, the US Virgin Islands, American Samoa and California. Within coastal state waters, Oregon was the lone state to add strong protection this year with the designation of its 6th marine reserve.

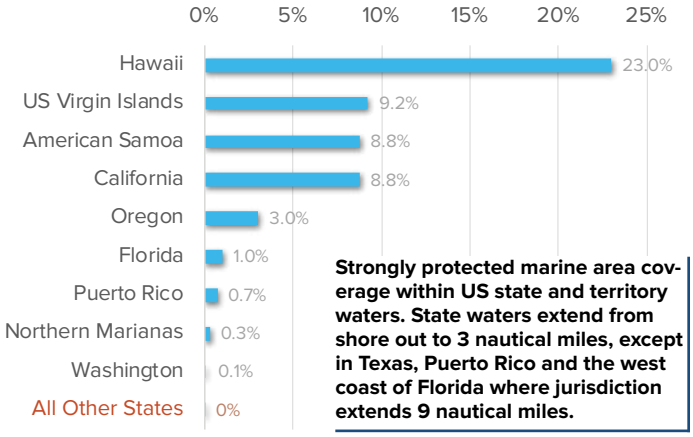
Total marine protected area coverage in US marine regions from shore out to 200 nautical miles. Strongly protected reserves cover significantly less ocean area than MPAs in all regions except the Pacific Islands.



Marine Protected Area Coverage by US Ocean Region

Squirrelfish in Papahānaumokuākea Marine National Monument, America's largest protected area.

Strongly Protected Marine Area Coverage by US States and Territories



Strongly protected marine area coverage within US state and territory waters. State waters extend from shore out to 3 nautical miles, except in Texas, Puerto Rico and the west coast of Florida where jurisdiction extends 9 nautical miles.

This year we celebrate two giant steps forward for ocean conservation taken in US federal waters by President Barack Obama, who's legacy includes 855,000 sq mi of ocean protected during his tenure. The first was the expansion of Papahānaumokuākea Marine National Monument from 139,797 to 582,578 sq mi. Originally designated by President Bush in 2006 (at that time the world's largest MPA), this marine monument once again became the largest protected area on the planet in early September 2016, pushing its total area to over twice the size of Texas. The monument subsequently lost this title to the massive Ross Sea Protected Area in Antarctica announced at the end of October 2016. Papahānaumokuākea is home to more than 7,000 species, a quarter of which are endemic, or found nowhere else on Earth; some of these species have only recently been discovered.

President Obama also created the first marine monument in the US Atlantic. At 4,913 sq mi, the Northeast Canyons and Seamounts Marine National Monument protects the only four seamounts in US Atlantic waters as well as canyons that host hundreds of species, including stony corals, soft corals, sea pens, anemones, sponges and black corals—some dated to more than 4,000 years old. The monument intends to phase out commercial fishing in the next seven years but will allow recreational fishing. It is unclear right now how strongly this area will ultimately be protected.

Biogeographic Representation

Our ocean has many different habitat types with species assemblages unique to each one. To achieve conservation it is important that we balance protection across all of these diverse regions, similar to a diversified investment portfolio strategy, termed "biogeographic representation." The US has yet to achieve representative protection across all of our diverse biogeographic regions. The new monument in the NE Atlantic is a powerful step in the right direction. It not only protects a large, ecologically significant area – the biodiverse seamounts off New England – but it also fills in a gap in existing protections, paving the way for a representative network of strongly protected marine areas in all US regions.

Future Efforts

In July of this year, Congressmen Sam Farr (D-Calif.) and Ted Lieu (D-Calif.) introduced landmark legislation (H.R. 5797) to safeguard a series of seamounts and the marine wildlife they support in the deep sea off California. These extraordinary places are highly productive 'oases' in the open ocean. California's seamounts support rare deep-water corals and sponges, endangered white abalone, endangered fin and blue whales and many other species. Safeguarding of these deep-sea ecosystems and the many other ecosystems around the country that lack strong protection is urgently needed.

On the Road to 30%

The global community is currently focused on protecting 10% of the ocean in ecologically representative and well-connected systems of MPAs by 2020, but recent research supports protecting at least 30% of the sea[3]. At the 2016 International Union for the Conservation of Nature's World Conservation Congress, a motion was passed by an overwhelming majority urging protection for at least 30% of each marine habitat in a network of MPAs with the ultimate aim of creating a fully sustainable ocean.

With only 1.6% of the global ocean in strong MPAs that are fully designated and implemented on the water, we have a long way to go until 30% is protected. But the recent progress noted in this report, especially the monument designations by President Obama, provide hope for marine life that are facing more threats than ever before including accelerating climate change impacts.

References

[1] Lubchenco, J., & K. Grorud-Colvert. (2015). Making waves: The science and politics of ocean protection. *Science, 350*, 382-383.

[2] Edgar, G.J. *et al*. (2014). Global conservation outcomes depend on marine protected areas with five key features. *Nature, 506,* 216-220.

[3] O'leary, B.C. *et al*. (2016). Effective Coverage Targets for Ocean Protection. *Conservation Letters*.

Data Sources

Information used in this report was obtained on November 1, 2016. For current data, please consult *http://mpatlas.org*. We acknowledge NOAA MPA Center for original information about US marine protected areas.

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