

NEW ZEALAND DESIGNATES NETWORK OF DEEP SEA PROTECTED AREAS COVERING MORE THAN ONE MILLION SQUARE KILOMETERS

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On 15 October 2007, the New Zealand government designated an enormous network of protected areas spanning 1.2 million km² of the nation's deep sea. The 17 "benthic protection areas" (BPAs) that comprise the network will be off-limits to bottom trawling and dredging. The network covers 30% of New Zealand's entire Exclusive Economic Zone, and is considered to be the largest single marine protection measure ever designated within a nation's EEZ.

The BPAs, which take effect on 15 November 2007, extend from subantarctic waters south of Campbell Island to the subtropical Kermadec region, comprising a range of depths and habitats, including seamounts. Most of the area is beyond current trawlable depth (1000+ meters deep), so the areas have experienced little or no bottom-fishing activity in the past.

Other fishing activity, including midwater trawling, will still be allowed in the BPAs in accordance with existing New Zealand fisheries law. The new regulations governing the BPAs are available at <http://gpacts.knowledge-basket.co.nz/regs/regs/text/2007/2007308.txt>.

Initiated by industry

The BPA designation represents the completion of a process begun by the New Zealand fishing industry in early 2006 ("New Zealand proposes large no-trawl zone in EEZ", [MPA News 7:8](#)). The industry's initial proposal for a network of deep-sea trawl closures consisted of 14 sites, and was developed in response to the government's then-emerging biodiversity strategy and marine classification system. Government invited public comment on the BPA proposal, and industry amended it following this consultation period and discussions with the Minister of Fisheries.

Jeremy Helson, a senior policy analyst with the New Zealand Ministry of Fisheries, notes that three sites were added to the network in response to concerns that the industry-proposed network contained few habitats of special value. (A 2006 report by the National Institute of Water & Atmospheric Research found that the initial set of proposed BPAs were generally located in areas with low current value both for fishing and for fish biodiversity - www.cbd.int/doc/meetings/mar/ewsebm-01/other/ewsebm-01-leathwick-en.pdf.) Helson says, "The Minister of Fisheries suggested to industry that the proposal would be considerably strengthened if particularly sensitive habitats were included, such as hydrothermal vents. In response, the fishing industry offered to close the three additional areas to increase the conservation value of BPAs." One of the additional BPAs, Tectonic Reach, is situated along a submarine mountain chain and contains ten seamounts greater than 1000 meters in elevation as well as ten active hydrothermal vents.

Kevin Stokes, chief scientist for the New Zealand Seafood Industry Council, says there is a history in New Zealand of government and industry "talking and then doing", followed by legislation where necessary. "Motivations for action have come from government and industry on different occasions," says Stokes, who wrote an essay for *MPA News* in April 2006 on the proposed BPA network ("New Zealand Seafood Industry Proposes Huge Closures: Cynicism Or Pragmatism?", [MPA News 7:9](#)).

Stokes says the Deepwater Group Ltd (DWG), an organization that represents the large majority of middle-depth and deepwater quota holders in New Zealand, was mindful of developing biodiversity protection goals, MPA policy, and classification work. "The DWG sought a way of maximizing the achievement of government goals [for conservation] while minimizing the impacts on commercial operations," he says. "It undertook and contracted quality independent advice to help it put together the BPA proposals and worked hard for a long time with government to put effective measures in place." As part of the BPA negotiations, government agreed to delay establishment of further MPAs in the EEZ until at least 2013.

Compliance with the network, and criticism of it

Compliance of fishing vessels with the new BPAs will be monitored by satellite. Under existing New Zealand law, all vessels that would be capable of fishing in the BPAs are already required to carry and use an automatic location communicator, which transmits the vessel's positional data. The Ministry of Fisheries is able to track the location of each vessel from land. (Any vessels, foreign or domestic, that do not use automatic location communicators and operate outside the legitimate commercial system are subject to New Zealand's normal compliance monitoring, regardless of whether they are fishing in a BPA or elsewhere in New Zealand waters. This monitoring includes cooperative efforts with the New Zealand Defence Force for aerial and surface surveillance.)

The new BPA regulations require vessels to notify the fisheries ministry before entering a BPA with the intention to trawl in midwater. In addition, vessels must carry at least two observers and an electronic net monitoring system (ENMS). The ENMS continuously records the depth of the ground rope in relation to the seabed and positional data. If the ENMS records the ground rope coming within certain buffer zones above the seabed, that vessel is in breach of the regulations and may be criminally liable. "Nets that come within 100 meters of the seabed will be liable for up to a NZ \$20,000 fine," says Helson. "Those that come within 50 meters will be deemed to have hit the seabed, and will be liable for a fine of \$100,000 and forfeiture of vessel."

Chris Howe, executive director of conservation organization WWF-New Zealand, says it will not be difficult for New Zealand to manage the BPAs. "There are few if any practical challenges in managing the BPAs because the vast majority of the area is below trawlable depth," he says. "Since the BPAs are closed only to bottom trawling [and dredging], only the small areas that are within trawlable depths will require avoidance by bottom trawling vessels."

Howe is disappointed by the network, which he says is not representative of known benthic biodiversity and will lack real conservation impact. "Although the BPAs are technically representative according to a very broad-based classification of marine environments, we do not believe they are representative of benthic habitats of biodiversity significance," he says. "On the whole the BPAs protect some habitats, whose nature is largely unknown, against a single activity that does not threaten them now and is unlikely to threaten them in the foreseeable future. This is not to say that the habitats the BPAs protect are not valuable - they almost certainly are, even though we know little about them. But the benthic habitats that are within trawlable depth and that are already recognized by scientists as important are largely excluded from the BPAs." He cites a 2004 WWF-New Zealand report, *Shining a Spotlight on the Biodiversity of New Zealand's Marine Ecoregion*, in which scientists identified several benthic areas of biodiversity significance, including some at currently trawlable depths. (The report is available online at www.wwf.org.nz/fck_image_uploads/file/documents/NZ-marineBiodiv-screen.pdf.)

The fact that currently trawled areas are not part of the network has been a point of contention for conservation groups from when industry first released its proposal. Conservationists would prefer that trawled areas be allowed to recover inside BPAs. "The BPA network suggests that fished areas are not valuable for benthic biodiversity, which is plainly wrong," says Howe. He adds that New Zealand's national MPA Policy calls for protection of areas representative of biodiversity - fished or unfished. (The MPA Policy, established in 2005, is available at www.biodiversity.govt.nz/seas/biodiversity/protected/mpa_policy.html.)

Helson of the fisheries ministry points out that the national MPA Policy includes a principle that representative protection should, where possible, be sought in areas that minimize the impact on existing users of the marine environment. "Protection of fished sites may be necessary for the purposes of fisheries management, but this is outside the scope of the BPA proposal," says Helson. "Under the MPA Policy, additional closures may be necessary to meet the full set of biodiversity protection objectives. Until such time, the BPAs provide immediate protection to a range of habitats."

Helson says the extent to which the BPAs are representative of the full range of benthic habitats will be determined at a later stage. "There is not yet sufficient scientific information to determine whether the BPAs are sufficiently representative of New Zealand's offshore marine habitats and ecosystems - but they are certainly comprehensive," he says. "The objective of the MPA Policy is to protect marine biodiversity by establishing a network of MPAs that is comprehensive and representative of New Zealand's marine habitats and ecosystems."

One milestone toward that objective, according to the MPA Policy, is for New Zealand to set aside 10% of its waters in MPAs by 2010. The BPA network appears to achieve that target by itself. Helson says, though, that the MPA Policy will continue to be implemented in coastal areas that were largely excluded from the BPA network. In addition, he says, government will take another look at the EEZ in 2013 to determine whether there are other habitats there that also need protection. "There are other policy initiatives that need to be fulfilled despite the comprehensive nature of

the BPA proposal," he says. "One thing is for sure, though: the BPAs make a significant contribution to marine protection in New Zealand."

For more information

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BOX: Other large trawl closures around the world

New Zealand's network of benthic protection areas is the latest large-scale trawl closure to be designated worldwide, amid growing concern of the impacts of such activity on sensitive deep-sea habitats:

- In 2005, the US designated a 950,000-km² trawl closure in the Aleutian Islands of Alaska ("Huge Aleutian MPA approved", [MPA News 7:3](#));
- Also in 2005, a 1.6 million-km² network of trawl closures was designated for the Mediterranean and Black Seas, primarily comprising waters outside national jurisdictions ("Bottom trawling prohibited below 1000 meters in Mediterranean", [MPA News 6:9](#));
- In 2006, major fishing companies announced a voluntary halt to trawling in 11 deep sea areas of the Indian Ocean ("Four Companies to Halt High-Seas Fishing in Southern Indian Ocean", [MPA News 8:1](#)); and
- In early 2007, more than 20 nations agreed to strict, voluntary limits on bottom trawling on the high seas of the South Pacific region ("Agreement Places Strict Limits on Bottom Trawling in the South Pacific", [MPA News 8:10](#)).