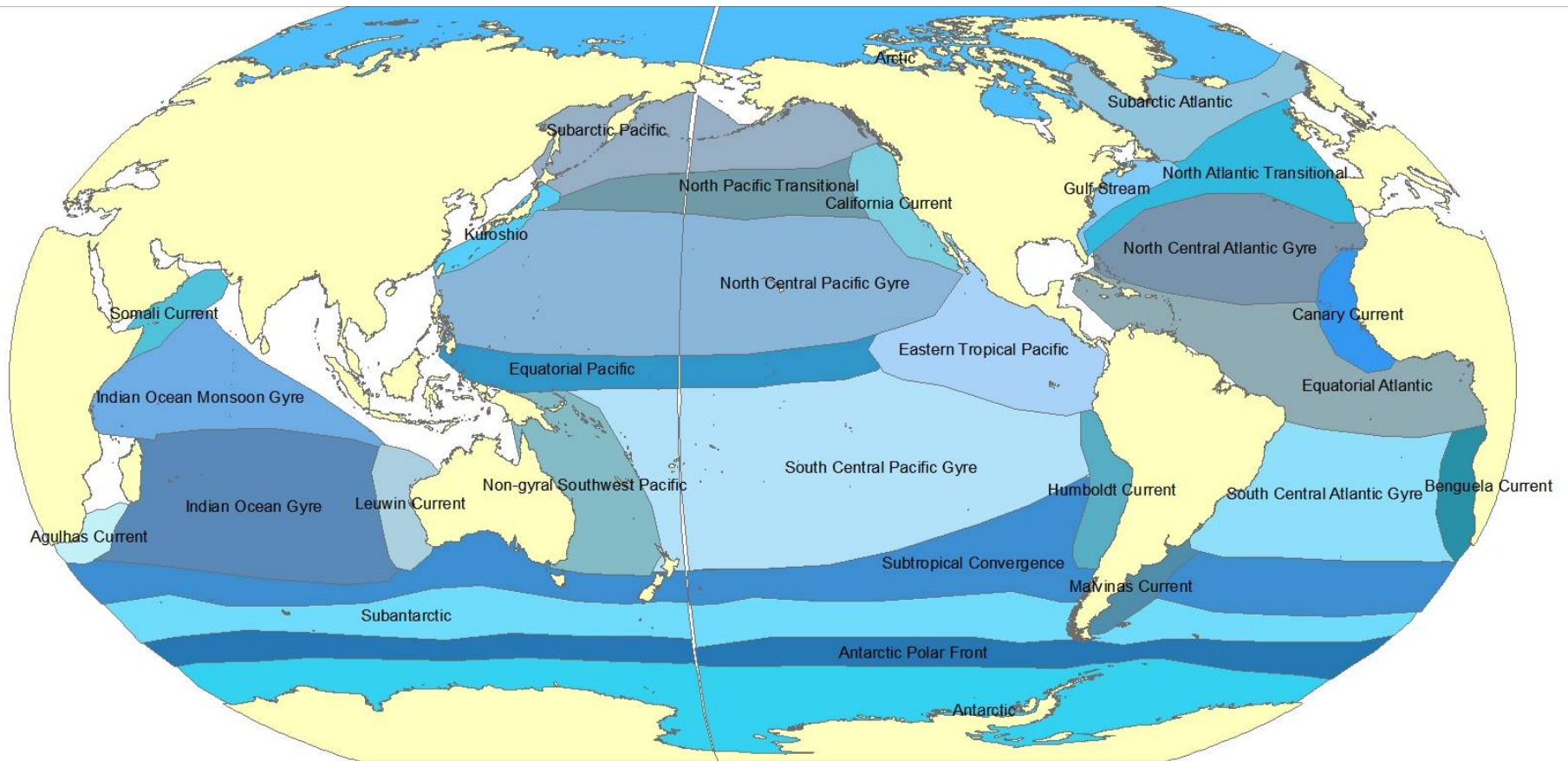


# Proposed draft marine bioregions

## 1. PROPOSED PELAGIC BIOREGIONS

Map 1. Proposed draft pelagic bioregions



### List of proposed pelagic bioregions:

1. Agulhas Current
2. Antarctic
3. Antarctic Polar Front
4. Arctic
5. Benguela Current
6. California Current
7. Canary Current
8. Eastern Tropical Pacific
9. Equatorial Atlantic
10. Equatorial Pacific
11. Gulf Stream
12. Humboldt Current
13. Indian Ocean Gyre
14. Indian Ocean Monsoon Gyre
15. Kuroshio
16. Leuwin Current
17. Malvinas Current
18. Non-gyral Southwest Pacific
19. North Atlantic Transitional
20. North Central Atlantic Gyre
21. North Central Pacific Gyre
22. North Pacific Transitional
23. Somali Current
24. South Central Atlantic Gyre
25. South Central Pacific Gyre
26. Subantarctic
27. Subarctic Atlantic
28. Subarctic Pacific
29. Subtropical Convergence

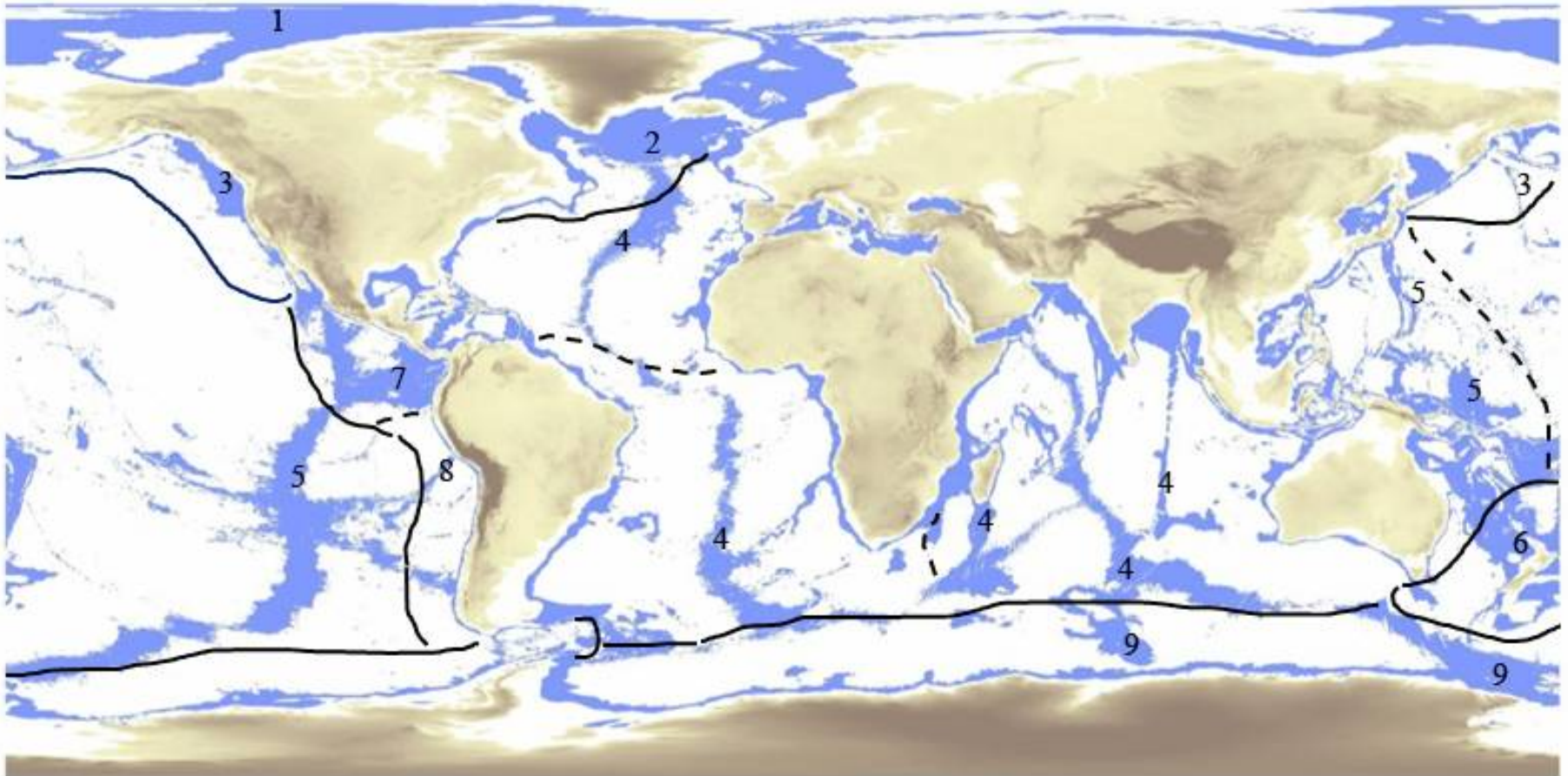
## 2. PROPOSED BENTHIC BIOREGIONS

The proposed deep-sea benthic biogeographic classification encompasses at present only three large depth zones as follows:

- 800-3500 m, the **lower bathyal**;
- 3500-6500 m, **the abyssal**; and
- depths greater than 6500 m, **the hadal**, which is located primarily in the trenches.

A lower priority was given to the upper bathyal, depth range 300-800 m, because almost all of the bottom at that depth is within the EEZ of one country or another.

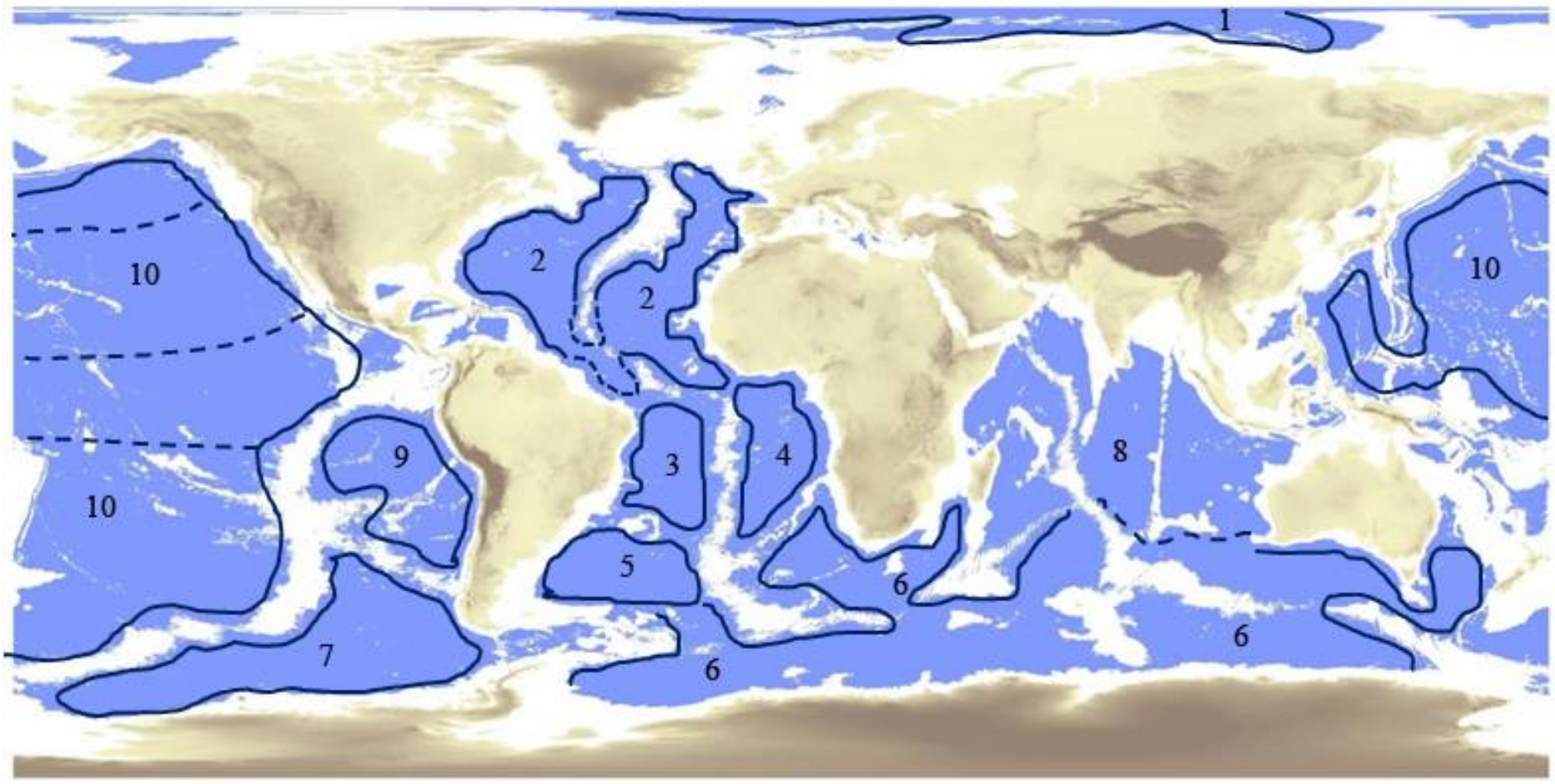
**Map 2.** Proposed lower bathyal provinces. 1 – Arctic; 2 - North Atlantic Boreal; 3 - North Pacific Boreal; 4 - Central Atlantic-Indian-South Australian; 5 - Western Pacific; 6 - New Zealand-Kermadec; 7 - Cocoplantensis; 8 – Nazcaplantensis; and 9 - Antarctic



**List of draft proposed lower bathyal provinces:**

1. **Arctic**, including entire Arctic Ocean Basin and Norwegian-Greenland Sea in the east and to the Bering Strait in the west;
2. **North Atlantic Boreal**, from the Iceland-Faroe Ridge in the north south along the Reykjanes Ridge, over the Newfoundland Seamounts and following the Western Boundary Undercurrent southward along the eastern slope of North America to off Cape Hatteras;
3. **North Pacific Boreal**, Aleutian Ridge in the North through the Gulf of Alaska to approximately the Mathematicians Seamounts in the eastern Pacific and including the Emperor Seamounts and the area off Hokkaido in the west;
4. **Central Atlantic-Indian-South Australian** perhaps divided into North and South Central Atlantic and Indian sub-units, includes all of the Mid-Atlantic Ridge from the southern extension of the Reykjanes Ridge to the junction with the Walvis Ridge in the south, all of the Indian Ocean from about 40° S northwards and easterly to encompass the Antarctic Intermediate Water south of Australia, including seamounts off Tasmania;
5. **Western Pacific**, from Hokkaido southward to seamounts along the Mariana Ridge to the Solomon Islands and Fiji, probably extending eastward beyond the East Pacific Ridge to about 83° W off Chile and Peru;
6. **New Zealand-Kermadec**, plateaus around New Zealand and extending northward along the Kermadec and Lau Ridges almost to Tonga;
7. **Cocoplatis**, encompassing all the ridges and seamounts of the Cocos Plate;
8. **Nazcaplatis**, suggested by Parin et al. (1997) to encompass the ridges of the Nazca Plate;
9. **Antarctic**, both east and west, with subdivisions centered on the Weddell Sea eastward to the Macquarie Ridge and from Ross Sea to the Antarctic Peninsula.

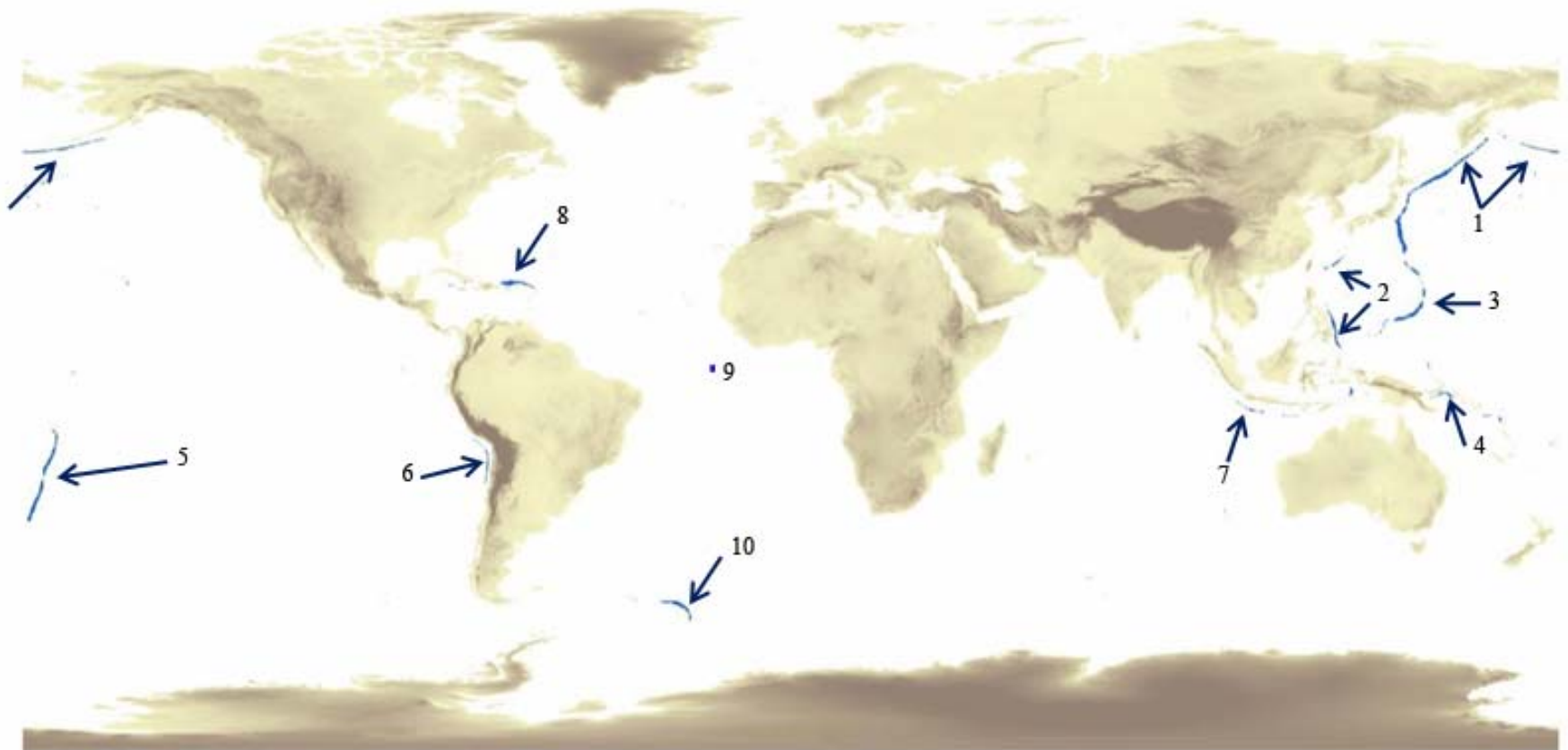
**Map 3.** Proposed abyssal provinces. 1 - Arctic basin; 2 - North Atlantic; 3 - Brazil Basin; 4 - Angola and Sierra Leone Basins; 5 - Argentine Basin; 6 - Antarctic East; 7 - Antarctic West; 8 - Indian Ocean; 9 - Nazcaplatensis; and 10 - Pacific Ocean



## **List of draft proposed abyssal provinces:**

- 1. Arctic basin;**
- 2. North Atlantic**, including all areas north of the equator under the influence of North Atlantic Deep water;
- 3. Brazil Basin;**
- 4. Angola and Sierra Leone Basins;**
- 5. Argentine Basin;**
- 6. Antarctic East**, which includes the areas where very cold bottom water flows into Cape, Agulhas, Natal, and Crozet and South Indian Basin and perhaps the Tasman Sea to about 170 E;
- 7. Antarctic West**, includes the Amundsen Plain in the region from the Ross Sea to the Antarctic Peninsula and north to the Antarctic-Pacific Ridge and the Southeast Pacific Basin;
- 8. Indian Ocean**, including all the basins north of approximately 30 S (this region is not well studied and some parts of this province may have species following the Antarctic Bottom Water northward);
- 9. Nazcaplatensis**, includes the Peru and Chile Basins;
- 10. Pacific Ocean**, encompassing the entire Pacific from the Antarctic and East Pacific Ridges in the south-east to the Aleutian ridge in the north and all of the abyssal depths in the western Pacific (divided into sub-units from north to south based on projections of food delivery from the photic zone as well as general decline in dissolved oxygen from south to north).

**Map 4.** Proposed hadal provinces: 1 - Aleutian-Japan Province (Aleutian, Kuril-Kamchatka, Japan, Izu-Bonin Trenches); 2 - Philippine Province (Philippine and Ryuku Trenches); 3 - Mariana Province (Volcano, Mariana, Yap and Palau Trenches); 4 - Bougainville-New Hebrides Province (New Britain, Bougainville, Santa Cruz, and New Hebrides Trenches); 5 - Tonga-Kermadec Province; 6 - Peru-Chile Province; 7 - Yavan Province; 8 - Puerto Rico Province; 9 - Romanche Province; and 10 - Southern Antilles Province



**List of draft proposed hadal provinces:**

**Pacific Ocean Subregion:**

1. Aleutian-Japan Province (Aleutian, Kuril-Kamchatka, Japan, Izu-Bonin Trenches),
2. Philippine Province (Philippine and Ryuku Trenches),
3. Mariana Province (Volcano, Mariana, Yap and Palau Trenches),
4. Bougainville-New Hebrides Province (New Britain, Bougainville, Santa Cruz, and New Hebrides Trenches),
5. Tonga-Kermadec Province,
6. Peru-Chile Province.

**North Indian Subregion:**

7. Yavan Province.

**Atlantic Subregion:**

8. Puerto Rico Province
9. Romanche Province.

**Antarctic-Atlantic Subregion:**

10. Southern Antilles Province