

Offshore fresh (or freshened) groundwater: Research achievements and future perspectives

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Table S1: Different nomenclature applied to OFG systems.

Terminology	References
Fresh groundwater or paleowaters extending under the sea	Edmunds and Milne (2001)
Submarine freshwater aquifers	Sauter et al. (2003)
Offshore fresh- or low salinity water	Cohen et al. (2010); Paleologos et al. (2018)
Submarine fresh or low-salinity groundwater	Bakken et al. (2012)
Offshore fresh groundwater (OFG)	Post et al 2013, Knight et al. 2018
Offshore low-salinity groundwater	Kooi & Groen 2001
Fresh SGD (coupled with OFG research)	Moosdorf and Oehler (2017); Paldor et al. (2020); Arévalo-Martínez et al. (2023); Attias et al. (2021)
Offshore freshened groundwater (OFG)	Micallef et al. 2021

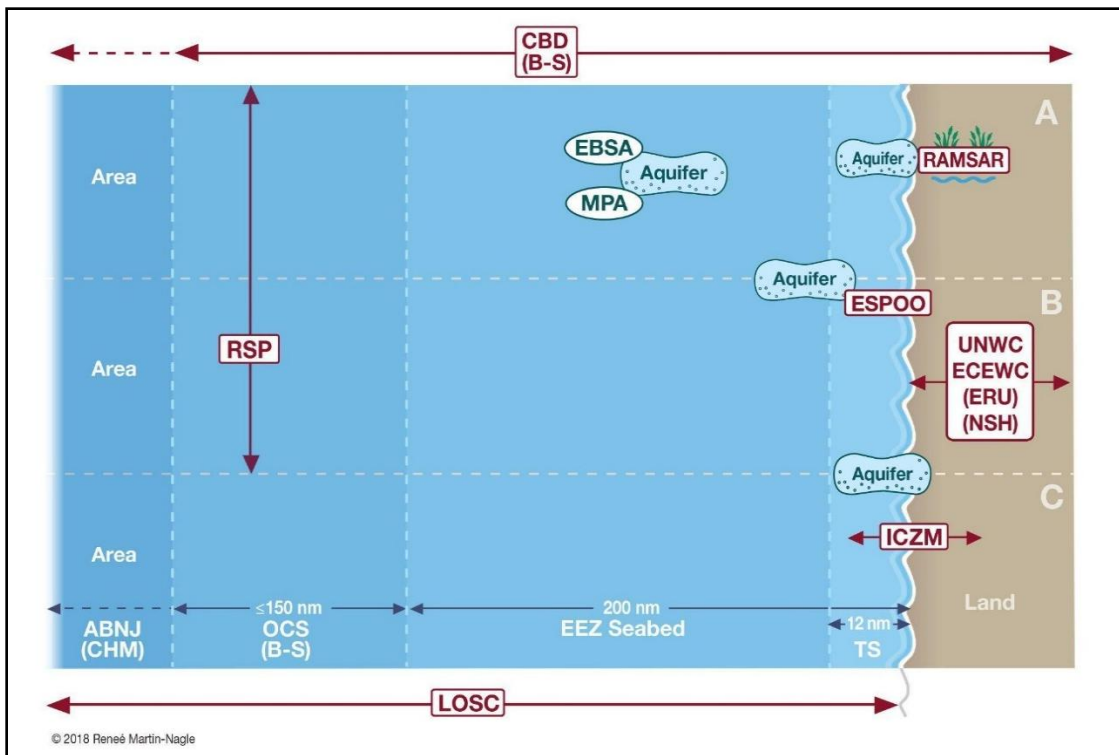


Figure S1: Schematic diagram of global overlapping legal regulations and gaps for OFG. ABNJ : Area Beyond National Jurisdiction; B-S: Benefit-sharing; CBD: 1992 Convention on Biological Diversity; CHM: Common Heritage of Mankind; EBSA: Environmentally/Biologically Sensitive Area; ECEWC: 1992 UNECE Water Convention; ERU: Equitable and Reasonable Utilization; ESPOO 1991 Espoo Treaty (Convention on Environmental Impact Assessment in a Transboundary Context); EEZ: Exclusive Economic Zone; ICZM: Integrated Coastal Zone Management; LOSC: 1982 UN Law of the Sea Convention, MPA: Marine Protected Area; NSH: No Significant Harm; OCS: Outer Continental Shelf; RAMSAR: 1971 Ramsar Convention on Wetlands; RSP: UNEP Regional Seas Programme; TS: Territorial Sea; UNWC: 1997 UN Watercourses Convention.