

# GLOBAL OCEAN CURRENTS REFERENCE

Marine Science Division | Educational Resource

Warm Surface Current

Cold Surface Current

↻ Gyre Direction

Major Current	Ocean Basin	Temperature	Primary Characteristic
Gulf Stream	North Atlantic	Warm	Fast, intense western boundary current
California Current	North Pacific	Cold	Upwelling-rich eastern boundary current
Kuroshio Current	North Pacific	Warm	Pacific equivalent of the Gulf Stream
Benguela Current	South Atlantic	Cold	Supports highly productive ecosystems
Antarctic Circumpolar	Southern Ocean	Cold	Only current to flow around the globe

**Note:** Ocean currents are driven by wind, water density differences, and the Coriolis effect.

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