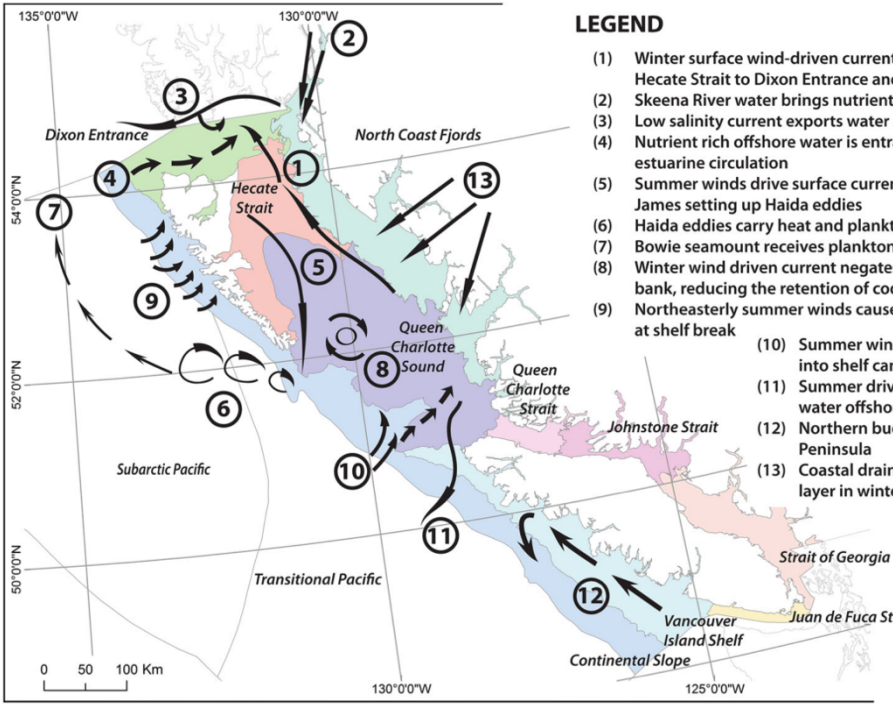

LEGEND

(1) Winter surface wind-driven current exports heat and plankton from Hecate Strait to Dixon Entrance and to the Alaska Gyre
(2) Skeena River water brings nutrients to the Chatham Sound Estuary
(3) Low salinity current exports water along north side of Dixon Entrance
(4) Nutrient rich offshore water is entrained into Dixon Entrance by estuarine circulation
(5) Summer winds drive surface currents offshore around Cape. St. James setting up Haida eddies
(6) Haida eddies carry heat and plankton from Hecate Strait to offshore
(7) Bowie seamount receives planktonic larvae from Hecate Strait
(8) Winter wind driven current negates clockwise gyre around middle bank, reducing the retention of cod larvae in Hecate Strait
(9) Northeasterly summer winds cause upwelling of nutrient rich water at shelf break
(10) Summer wind driven upwelling of deep water into shelf canyons
(11) Summer driven circulation moves saline surface water offshore
(12) Northern buoyancy current reverses at Brooks Peninsula
(13) Coastal drainage produces low salinity, surface layer in winter