# Dissolved material transports by submarine groundwater discharge and the effects on ecosystem in Edajima, Hiroshima

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Submarine groundwater discharge (SGD) is recognized as an important pathway from land to ocean, not only for water and dissolved material transports but also for ecosystem in the coastal zone. Strontium isotope ratios of the seashell (oyster) in Edajima, Japan, were analyzed to evaluate the ratio of fresh water component of SGD. The seepage meters (for SGD flux), piezometers (for groundwater potential and sampling), thermister thermometers (for sea bottom temperature) and resistivity (fresh-salt water distribution) measurements had been also made to evaluate the flux and quality of the SGD. The seabed temperature agreed with the magnitude of the submarine groundwater discharge. SGD may be one of the important geophysical and geochemical factors for the seashell ecosystem in the coastal zone.