



The reversed transport direction is visible here because the long jetties at the marina entrance function as a breakwater for the shore south of the entrance, sheltering that local shore from waves out of the north. In this sheltered environment, the shore south of the marina may preserve the effects of occasional intervals of high waves from the southwest, which would not be preserved in the absence of such shelter. At tidal inlets along ocean coasts, large ebb tidal deltas function as submerged breakwaters producing the same affect on shores in their lee as do the jetties at this Chesapeake entrance.

General Implications: It is the custom in engineering and geological reports to characterize longshore transport by a single direction, the transport direction produced by waves from the prevailing winds. This practice hides the fact that there can be significant longshore transport opposite to the direction that prevails on average. Such reversals can be a significant aspect of coastal processes affecting engineering design and geologic understanding along many shores. (Photo: Cyril Galvin, Box 623, Springfield, Virginia 22150 USA, 703-569-9187, galvincoastal@juno.com. Taken November 1979.)