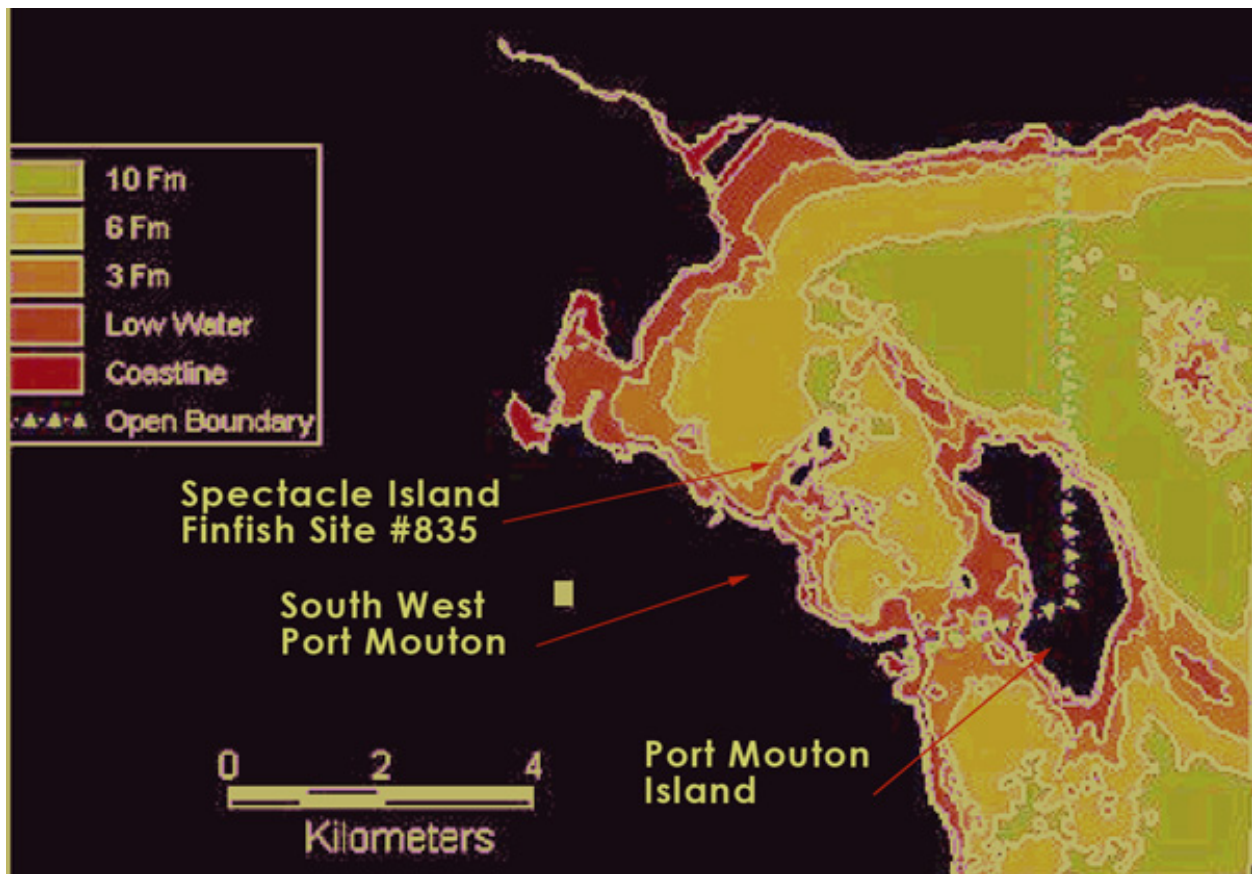


An Oceanographic View of Spectacle Island Finfish Site (0835)



Digital chart shows the partially enclosed basin between Spectacle Island and Port Mouton Island and the cul-de-sac inshore of Spectacle Island.

Depth

10-12 m

Topography

Partially (>75%) enclosed basin with cul-de-sac inshore of Spectacle Island

Tidal Range

Small tidal range - 2.2 m

Tidal Flushing

Theoretical tidal flushing in the greater Port Mouton Bay is 2.4-5 times longer than other locations in SW Nova Scotia and Bay of Fundy (see currents below)

Currents

Weak, *recirculating* currents

Speed 2 cm/s or less 35% of the time (current meter record - Jun18-Jul 2/08)

2 cm/s or less 25% of the time (current meter record – Dec 7/07-Jan8/08)

Drogue tracking - currents re-circulating and resulting in little or no flushing at Spectacle Island (March 13/07)

Bottom drifter tracking – no evidence of drifter movement (drifters released at Spectacle Island have yet to be recovered)

Winds

NE winds move wastes in direction of Carter's Beach, a protected beach

NW winds move wastes in direction of Spectacle Island and SouthWest Port Mouton beaches

S, SE winds move wastes in direction of Summerville Beach, a Provincial Park

Only SW winds (which tend to be light) blow in direction of open ocean

Lobster Habitat

Spectacle Island site is in midst of prime lobster fishing ground to which lobsters formerly migrated to moult and discharge eggs.

Because of the shallow depth, the enclosed topography, small tidal range, weak flushing, weak recirculating currents, wind transport of waste to protected beaches and degradation of prime lobster habitat, the Spectacle Island site is beyond the range of suitability for open-net finfish aquaculture.