Area 7 Cockle bed fishery. Factors, implications and considerations:

Wind factors:

Strong winds from the North to Northwest on a flood tide will raise considerable heaped up short swells between the Eagle and the Buxey, breaking on the Buxey.

Strong winds from the East to the South East on an ebb tide heap up considerably and break on the Gunfleet, Buxey, Swallow Tail and Foulness sands.

The flat bottomed shallow drafted landing craft vessels which are being considered by the operators can prove unsuitable and difficult to handle in the short seas found in this exposed location during poor weather.

Weather limitations on working this area should be considered.

Tidal factors:

Between the Ray Sands and the Buxey Sands there is a low-way known as the "Ray Sand Channel" that fills with water considerably earlier than the Buxey Sands covers and would easily cause people to be cut off with a tidal range of over 5 metres on springs.

As the flood tide starts the mud / sands become less stable due to saturation. Surge tides are to be considered if gales are expected in the Channel or Northern North Sea.

By the rule of 12 with 5.2m when on springs each hour the tide will rise by:

Hour 1: 0.43m

Hour 2: 0.86m

Hour 3: 1.29m

Hour 4: 1.29m

Hour 5: 0.86m

Hour 6: 0.43m

SAR implications:

No RNLI Hovercraft assets in the area.

The broad expanse of shallow water on the flood would prove difficult for Clacton, Burnham and also West Mersea RNLI Lifeboats to get to the casualty / casualties in time.

South Woodham CRT attendance for initial assessment: South Woodham to Bradwell-on-Sea: 45 Mins run-time plus extra time to incident location.

The nearest Mud CRT are: Clacton, Walton and Medway.

Clacton CG to Bradwell-on-Sea: 1 hr 49 Mins run-time plus extra time to incident location.

Medway CG to Bradwell-on-Sea: 1 hr 58 Mins run-time plus extra time to incident location.

R125 on a good day could be on scene in 30 minutes from calling. Essex Fire Service Leigh on Sea Swift Water Entry Team run-time to Bradwell-on-Sea 1 Hr 15 Mins plus extra time to incident location.

How to make the Area 7 Cockle fishery safer:

Limit fishing to a pre set sea state and wind strength / direction. Operators to keep accurate records of numbers, locations and durations of persons on the mud flats so that in the event of an emergency they would be able to share that information with the rescue authorities. Improved safety equipment carried by the fisherman? (lifejackets, PLB, pinpoint flares, dinghy or boat stationed in the location of hand dredging. Risk assessments to be provided by operators of "Plan B" if the weather suddenly deteriorates.

To avoid hand dredgers working the same area that mechanical dredgers have worked while the tide was up, as the sea bed would have been disturbed and could leave silt filled holes.

It is one of the remotest locations in the Thames district to get a mud team to and extreme caution should be taken requiring well thought out risk assessments by the operators.