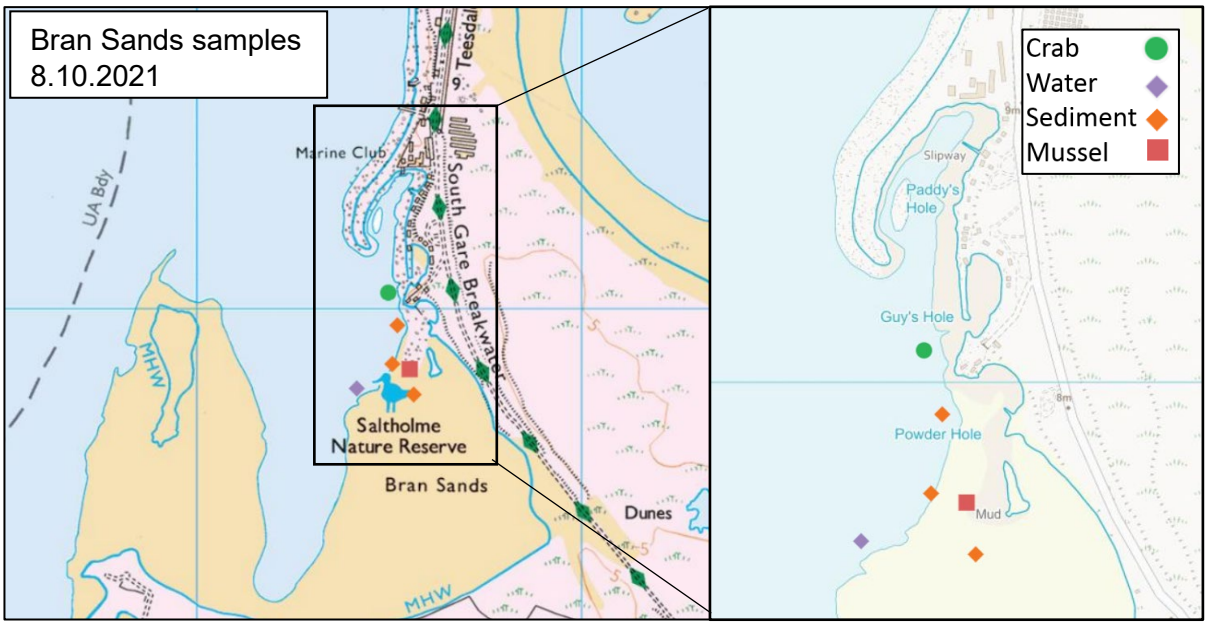
Summary of Teesside Crab incident A&R investigation – 8th October 2021

Bran Sands summary

On 8th October 2021 two EA officers attended a pollution investigation at Tees Estuary after multiple reports of dead & dying crabs at Bran Sands from peeler crab bait collects on 4th October. Officers attended Bran Sands at low tide (10:30) and met the member of public who initially reported the dead crabs and showed them where the crabs were dying/dead. This person also had some frozen samples of dead crabs collected on 4th October which were handed over to the EA. The EA officers observed 100s of crabs which were dead and many which were in the process of dying and exhibiting a strange lethargic twitching behaviour – either on their backs or on their fronts but not able to move in any controlled manor. This was true of crabs both submerged under the water and exposed/washed up at low tide. Dead lobsters washed up were also observed. There was no other signs of pollution (smell, change in water colour or debris). All other marine organisms were seen still alive including mussels, lug worms, tube worms, periwinkles, barnacles and fish, it only seemed to be Crustacea affected. The EA officers took sediment samples from three locations at Bran Sands. EA officers also took ~30 live mussels for analysis, along with a Seawater sample at knee depth.



Conversation with members of public

The member of public who showed us the site said they had never experienced anything like this in 40 years of peeler crab collection/ bait digging at Bran Sands. Other members of public on site also expressed their disbelief. One said that a new dredger had been dredging in the Tees estuary deeper than usual 2 weeks prior to this event and that a larger sediment plume than normal was observed. General consensus amongst locals was that this dredging activity was unusual. Another member of public said that when they lifted their lobster pots they had seen and smelt human excrement on them.

Whilst on site EA officers met NIFCA officers also investigating. They recommended we attended Redcar beach where more dead crabs had been observed.

Redcar beach at Coatham Rocks.

EA officers arrived onsite at 13:00 (low tide) with NIFCA officers and observe 100s more dead and dying crustceans at Coatham Rocks, Redcar (NZ5993825711). Species observed include green shore crab, velvet swimming crab, Edible crab and common lobster. Large adult edible crabs and lobster (dead & alive) were seen which are not usually observed in the intertidal area so suggust they have died or become weak further offshore and then been washed ashore. Further samples of dying crabs and dead lobster were taken for freezing and analysis by EA at Redcar. No other marine life was observed to be adversly affected – only crustaceans

Photo 1
Dead and dying adult edible crabs at Cotham Rocks, Redcar. Crabs appeared in great distress and many of the live crabs had self amputated limbs and claws beside them which is a known response to stress/ill-health

Greatham Creek
At 15:50 EA officers arrived at Greatham Creek to speculatively investigate crab health although no previous reports if ill-heah had been reported. Dead and dying crabs were also observed here at Greatham Creek (NGR;NZ5083525704) exhibitting similar lethargic and twiching behaviour. No samples were taken.

Seaton Carew Beach
At around 16:15 EA officers investigated Seaton Carew beach (south end - NZ5306329684). At this time the tide was coming in but dead and dying crabs were observed at the high tide wrack line and the shore line. No samples were taken.

Seaham Harbour
At approx 16:45 EA officers investigated Seaham Harbour and spoke to Marina office employee who said that no reports of any dead or dying marine life had been raised in the immediate local area. EA officers investigated on the beach and saw no dead marine life at the wrack line or at the waters edge. EA officers spoke to fishermen fishing on the harbour pier walls and they said they had been catching live crabs.

Additional Infomation
Photos and videos available on request

Dead Crabs have been to submitted to CEFAS for Analysis

Dead Crabs, mussel tissue, sediment and Water samples have been submitted to NLS (EA lab) for analysis for Metals, GCMS & LCMS on 19.10.2021.

Appendix

Bran Sands Sample submission records for NLS – submitted on 19.10.2021

	PRN	NGR	Material code
Crabs	90226770	NZ5549827042	9CZ1
Mussels	90226738	NZ5560126825 Sample Point 45401208	9CC3
Sediment 1	90226744	NZ5552326958	8FZZ
Sediment 2	90226745	NZ5550826855	8FZZ
Sediment 3	90226737	NZ5556626776	8FZZ