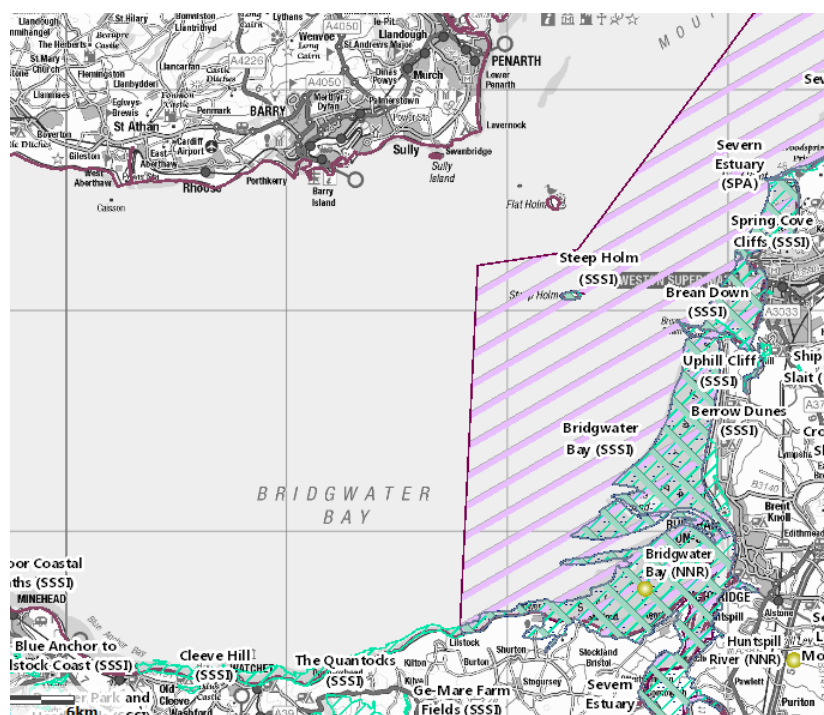


Annex 6

North Coast netting (Minehead to Weston super Mare)

The Severn estuary has the second highest tidal range in the world of about 13m and is one of the largest estuaries in Europe. This vast tidal range and high turbidity gives rise to one of the most extensive inter-tidal habitats in the UK comprising of saltmarshes, mudflats, sandflats, rocky outcrops and islands. The Severn estuary is a Site of Special Scientific Interest (SSSI) for the entire foreshore upstream from Blue Anchor (Somerset) to Frampton-on-Severn in Gloucestershire. From Lillstock (Somerset) up to Frampton-on-Severn, the wetland areas are designated as a Ramsar site; the mud/ sandflats are designated as a Special Protected Area (SPA) for birds and the whole estuary is designated as a Special Area of Conservation (SAC) for the plethora of unique habitats and the migratory fish species. Within the SAC demersal mobile towed gear vessels are prohibited in the English half of the estuary. All four of these designations apply in Bridgwater Bay, which is also a National Nature Reserve.



Designated areas in Bridgwater Bay

Heritage value

The geography of the South West funnels the powerful tidal flow of the Bristol Channel past Minehead towards the Severn estuary. The wave action and long shore drift create and sustain very few natural, sheltered harbours in the lee of rocky headlines yet produce miles of wide sand/ shingle/ mud bays. Due to the constraints imposed by the tidal range, strong currents and extensive mudflats historically commercial fishermen operated multiple fishing methods both boat and shore based, some of which are ancient customs and unique to the Severn estuary; stake nets, lave nets, stone fish weirs, putcher ranks and mudhorses. Lave nets and putcher ranks are regulated by the Environment Agency and as such are not covered within this summary.

- **Fish weirs**

A fishery has existed on the sand in Minehead Bay since mediaeval times. It began in 1299 in the Manor of Minehead, with the installation of a 'V' shaped fish weir or 'stagna' of stone wall construction, now protected monuments that fill and trap fish on the flood tide. At the point of the 'V' a net is strung across a hole in the stone wall known as 'the gut' and fish are netted on the ebb tide. This fishing method produces fish, prawn and shrimp.



Minehead fish weir gut with net fishing. Photograph by David Austin.

Historically fishing rights were granted by the Dunster Estate who allowed tenants of cottages on North Hill, with no garden from which to grow food, the use of a fish weir. Fish weir structures dating back to Norman times, range from Lynmouth in Devon to Kilve in Somerset and were constructed in such a way that they could be fished at all heights of the tide. Today only two fish weir operators are left, two commercial fishermen who were paid by the previously titled English Heritage to maintain the three main monuments. They say there is no one interested in continuing to fish using this method once they retire.

This fishing method would *cease to exist* if any headline restrictions were imposed as a result of the netting consultation, as nets can only be hung, set and retrieved from the shore.

- **Herring stake net fishery**

In conjunction with the fish weirs, a herring stake net fishery also exists on the foreshore at Minehead. It is thought to be the only one of its kind in Great Britain and certainly the only one still in operation, albeit only a couple of times a year. The previously mentioned commercial fishermen are the only two remaining fishermen who fish the stakes some of which are 400 years old, by securing 3m high nets to the stakes as the tide is at slack water or about to flood. As the water ebbs the herring are picked out of the net and carried ashore. Herring congregate in Minehead Bay and are only caught on an ebb tide. The line of thirty stakes extends out along the foreshore for 250 yards but only a fraction of stakes are hung with nets, due to the age and ability of the two commercial fishermen and the tides. This fishery was operated by one of the commercial fishermen's great grandfather and those before him. He holds detailed records of catches dating back to 1436 and proof of such fisheries existing in the Honour (Manor) of Dunster since 1090.

The herring that are caught in the present day are sold at the quayside in Minehead, as both fishermen have commercial licences but because of the lack of popularity of the fish, they say they often have to give the fish away for free. Jamie Oliver has recently begun a campaign championing herring as a local, sustainable food source. Such a catalyst could spark a herring revival and provide opportunity for the business to become financially viable. The commercial fishermen say there is no one interested in continuing to fish using this method once they cease to do so.



Above: One of the commercial fishermen as young fisherman with his father and grandfather.

Below: The stake nets in situ in late 2015.



This fishing method would *cease to exist* if any headline restrictions were imposed as a result of the netting consultation, as nets can only be hung, set and retrieved from the shore. The herring nets are 9ft high because they are cut down from herring drift nets that are 18ft, once the nets are too badly holed to be repaired then they are used as stake nets. This is a prime example of the fishermen's ingenuity to diversify to increase their income. The commercial fishermen also drift net for herring in grounds around Minehead which is outside of the proposed boundary change area.

- **Stake nets**

Historically stake nets have been used along a fifty mile stretch of foreshore from Minehead to Middle Hope, a headland north of Sand Bay. The fixed engines byelaw that bisects Sand Bay now

prohibits stake netting upstream of the boundary line. Stakes are still in situ but few are fished due to access or conflict with anglers. Most stake netters are recreational but reports have been received over the last few years that catches are undersize, mesh sizes are illegal (observed by officers) and fish are sold locally.

At Dunster, permits to fish using stake nets from the foreshore are issued by Dunster Beach Holidays for a fee. Unfortunately survey responses were not received despite an explanation by phone and information being posted out to the company. One of the images below shows stake nets set at Dunster Beach with the tide flooding. The stakes are plastic stake fencing, in this case bright blue, with nets hung between them. The stakes are difficult to spot to the untrained eye and in this case were only seen due to the colour of the stakes. It makes this form of netting very mobile as the gear is easy to relocate. No markings were visible on the stakes nor were any buoys used to mark the location. This is common along the foreshore as each netter tends to net the same grounds.



Stake nets at Dunster Beach and a typical configuration using metal stakes elsewhere in the estuary

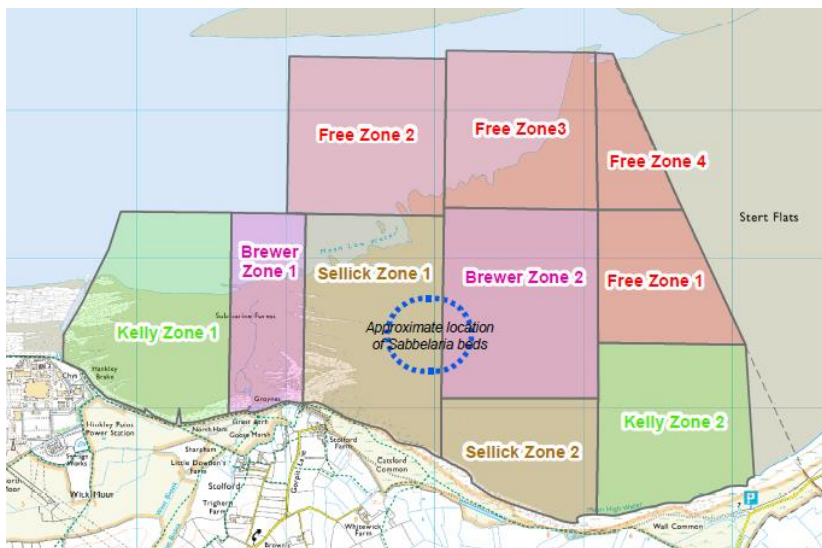
The highest intensity of stake net fishing occurs on the traditional grounds from Watchet up as far as Lillstock as Natural England prohibit netting west of Hinkley Point outfall. Data from the 2014 survey netting shows weighted scaffold/ metal poles and wooden poles are used as stakes as they are a more permanent fixture. Fishing grounds are very limited due to the nature of the estuary so netters ensure they work their stakes in a traditional way so as not to impede others. A diagram provided by the netters showed officers the main areas of netting activity and who works each tier. None of the gear is marked as historically each fisherman knows the others location, as they are set in an orderly fashion. The Watchet fishing grounds have been known to cause conflict with anglers. Of the netters who responded to the 2014 survey; 4 fished at Watchet and 1 at Minehead. Nets, mainly fished on neap tides (8m+) included gill, trammel and entangling nets, ranging from 66 yards to 150 yards long with a 4 – 5 inch mesh. Most tiers were soaked for either 6 or 8 hours a day or twice a day, targeting cod, whiting, ling and sprat in the winter and bass, mullet, smoothhounds and ray in the summer. It is hard to quantify whether such artisan fishing methods are declining as none of these netters commented on the questionnaires despite several copies being posted out.

At Stolford a historical stake net fishery exists using a traditional method - unique to the Severn estuary - called a mudhorse, in order to access the fishing grounds which are covered in estuarine mud. Records show 4 fishermen operating in 1851 using fyke nets to catch shrimp. Today only two commercial fishermen (a father and son) work these grounds frequently by wading through the mud using the mudhorse for stability and to carry the catch. Fyke nets for shrimp, gill nets and stake nets are fished and the catch is sold through their family run fish shop in Stolford.



Mudhorse in use. Photograph by Nigel Phillips.

Designated zones were established through Natural England permits, in order to allow access through the Bridgwater Bay National Nature Reserve so fishermen could set their nets and retrieve their catch. In Sellick zone 1 fyke and gill nets are used throughout the year and in Sellick zone 2 gill nets are used in spring and summer for bass and mullet. The Kelly zones were fished regularly up to the end of 2014 using gill and trammel nets. Fishing effort has since declined. The Brewer zones are not fished, as they are retired netters who wish to have the opportunity to continue the family fishing tradition.



Bridgwater Bay fishing zones

All the aforementioned stake net fisheries would *cease to exist* if any headline restrictions were imposed as a result of the netting consultation, as nets can only be hung, set and retrieved from the shore. It is for this reason that officers recommended a separate approach be considered for the management of the Somerset coast. Any headline restrictions will end years of traditional fisheries and historic ways of life both for commercial and recreational netters. A lot of resource has gone into working with the netters and Natural England in order to create the Bridgwater Bay zones.

The free zones shown on the above diagram allow others the opportunity to continue to fish in this traditional way, though none have been forthcoming since the permits inception in 2014.

One recreational netter responded to the coastal questionnaire in some detail, referring to the north Somerset coast but not specifying a location. He writes that 'fixed nets have been used for generations and it would be nice if it could continue but he understands the need for restrictions and supports the use of permits providing they are cheap.' He states that 'he does not want to see a complete ban on the use of fixed nets within 1 mile of the shore bringing to an end centuries of tradition.' He questions the 70mm mesh size as it leads to a lot of undersize fish being caught and by the time the tide has ebbed the fish are often dead or very nearly dead. He states since the bass catch and release restrictions have come into effect he will not use his net. He claims there are not many recreational netters and the ones he knows of do not use their nets very often. He uses his net for a total of four weeks a year, observing MLS, net sizes and the fish caught are for his own use.

- **Drift netting using a Somerset Flatner**

Within Bridgwater Bay National Nature Reserve and the River Parrett estuary are two recreational netters who were part of the Wessex Fishermens Association and have been fishing for 40 years, 'for codling and whiting, mainly mullet for pleasure, any sprats are given away'. They said the area is a historic herring fishery, with herring barreled at Lilstock since the eighteenth century. They require three men onboard a specialist flat bottomed boat, called a Somerset Flatner once widely used in inshore waters of Somerset, to enable them to drift net for sprat, herring and mullet from the mouth of the Parrett to Steart Island. It is believed to be the only one of its kind still operating along this coastline. They set 3 trammel nets along Steart Island (two of which are in the mouth of the River Parrett and one is off the headland) and one across the mouth of the Huntspill River. They also set two tiers of stake nets on a large sandy area in Bridgwater Bay, known as The Gore. There were three or four fishers operating in this area, now they are the last remaining. They have been given fishing gear each time a fisher has ceased operating but they repeated the rhetoric of the other fishers that 'no young people are taking up fishing like this' due to the extreme tidal conditions on the Severn estuary that demand a hard amount of work yet do not reap a large financial reward.

Stake net fishing on The Gore would *cease to exist* if any headline restrictions were imposed as a result of the netting consultation, as nets can only be hung, set and retrieved from the shore. The trammel netting would be severely restricted by any headline restrictions as nets would need to be set further out into the channel where the tidal currents make it unsuitable. The future of drift netting in this area could also be jeopardised by the netting consultation depending on the depth of water fished, the headline used and the ability to change fishing grounds as a result of any headline restrictions.

- **Fixed netting using boats**

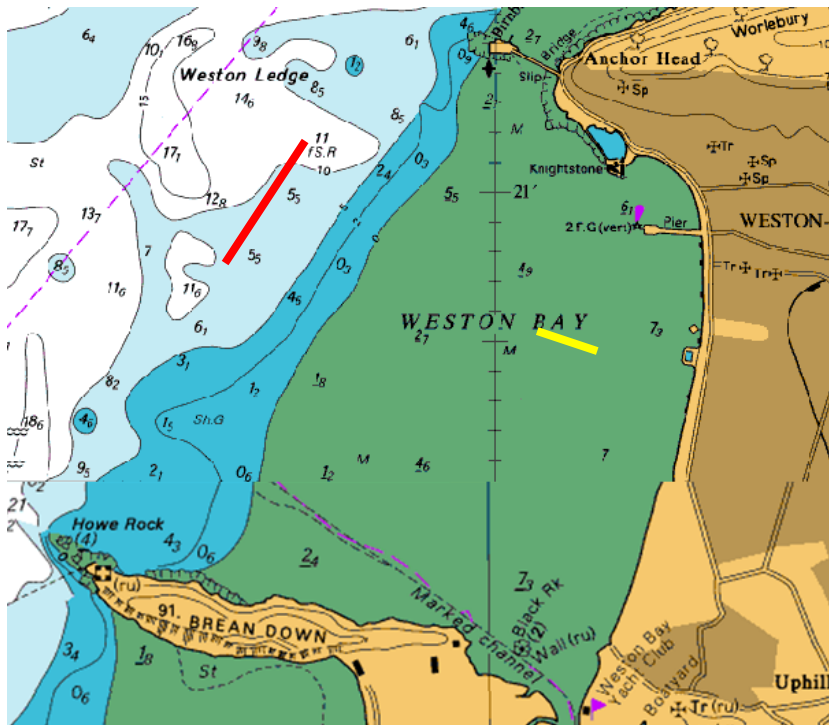
A commercial netter, who has two registered vessels, replied to the coastal questionnaire; he has been restricted in his fishing activity and suffered a loss of income (figures not provided) due to the prohibition of mobile gear vessels in the designated SAC. When answering about the financial affects he writes 'to bring more restrictions to this area, I feel would be wholly unfair.' When asked about how the proposals will affect his fishing he states 'it would stop me fishing, not just affect me, and my 15ft 6" vessel would not be able to cope with travelling further afield from this area' as he

needs the lee of the land in order to operate his vessel safely. He states his livelihood would be affected, due to the strong tidal currents and it would be impossible to get 3m of water over his nets, as such he would like to see the current lack of restrictions maintained. The netter acknowledges recreational netters should be allowed to provide fish for the table but would like to see mesh size limits and restrictions on net length. He suggests one net only, abiding by MLS and possibly a height restriction on stake nets - presumably so they do not damage his boat.

Uphill Licenced Boatmen and Registered Fishermens Association use boats to set fixed nets from Burnham to Weston Bay. Depending on the state of the tide they set 200m of net per person. Their response to the coastal questionnaire stated they have 'no target species just fish in season such as cod and whiting in winter, thornbacks, bass, mullet, flounders and sole in summer, all in very small numbers.' When answering about the proposals they wrote 'if proposal 4 was implemented here it would stop us fishing totally'. Proposal 4 is the current situation so the inference is that they meant proposal 6 because they go on to state 'we can only fish in the shallow bays due to tide runs of the Bristol Channel the 3m headline proposal is not feasible.' Or perhaps they disagree with the current voluntary code of conduct in the Burnham, Berrow and Brean Angling Zone which states no netting. They write if recreational netting was prohibited 'it would stop us fishing altogether and stop us doing what we have always done.' They suggest two nets; 100m long per person with possible catch restrictions and add 'we are very dependent on weather and tides so fishing effort is quite low so action may not be required.' Officers presume they mean no change is needed to the current lack of restrictions. This organisation has been in existence since 1968 but ironically none of the members are commercial fishermen and as they age the numbers dwindle.

Within Weston Bay there used to be 3 or 4 netters fishing from Weston super Mare, now even less remain that officers know of; a recreational gill netter for cod and bass operating to the west of Birnbeck Pier and the other is a recreational gill netter who fishes by boat outside of Weston Bay. During a meeting, he claimed 'from Minehead to Weston there are approximately twenty recreational netters, none in Watchet; a few in Burnham; five in Weston and one or two in Clevedon.' He stated the peculiarities of Weston meant it could not conform to any of the proposals; he mentioned a Weston Flatner (flat bottomed boat) that could trawl in six inches of water and is able to haul in seven inches of water but ceased operating in 1980. He's concerned that the proposals would ensure such a historic fishing method is lost. However very few, if anyone is willing to continue fishing in this manner due to reasons previously stated.

He is not currently fishing in the estuary but might want to do so in the future, hence he is against any changes to the lack of restrictions. When spoken to he stated he fished with two nets, each 100 yards long with a 5" mesh, 4ft high, bottom set and on his survey response says he had 2 nets with a 0-3m headline; 2 with a 3-5m headline and 2 with a 5m headline targeting dabs, flounder, cod, whiting and sprats. Officers presume this is misinterpretation of the size options as he states recreational netters should be allowed two nets, 200m in length if restrictions were imposed. He states there is not enough fishing effort to justify changing anything as nature already limits fishing in the area (due to tides, weather, no safe havens) and that if recreation netting was prohibited it would 'totally destroy my recreational fishing and the investment in gear and vessel.' When spoken to, he stated rod and line anglers catch more than netters. He said outside of the 1nm limit at Holm Middle (between Flat Holm and Steep Holm) there is too much tide to set a net. A 3m headline would push nets out to the 5m mark on the Admiralty chart, as shown below in red.



Weston Bay 3m headline proposal implications

The netter also sets trammel nets in Weston Bay, shown above in yellow, to catch flounder, sole (rarely) and the odd ray. He claimed with 'a 3m or 5m headline, fishing would be destroyed.'

All of the aforementioned fixed netting would *cease to exist* if any headline restrictions were imposed as a result of the netting consultation, as nets would need to be set further out into the channel where the tidal currents make it unsuitable.

- **Stall netting**

There was one survey respondent who belongs to a small group of recreational stall netters (all of whom are retired) who fish from the shore, purely to continue the traditional fishing method. From September to January nine stall nets (also known as fyke and shrimp nets) with an aperture of 8" x 6" are secured alongside Birnbeck Pier. They are fished on spring tides every day for 7-8 days. In his survey response he writes they fish for shrimp and sprat. Officers have received reports that the sprat are sold to anglers as bait and that lots of juvenile bass are caught. The netter writes that 'their fishing effort is very low impact, with 100kgs of shrimp and the same for sprat caught between Sept – Dec last year, plus small cod, flounder and mullet.'

Stall net fishing at Birnbeck Pier would *cease to exist* if any headline restrictions were imposed as a result of the netting consultation, as nets can only be hung, set and retrieved from the shore.

Estuary boundary proposals

- **Severn estuary**

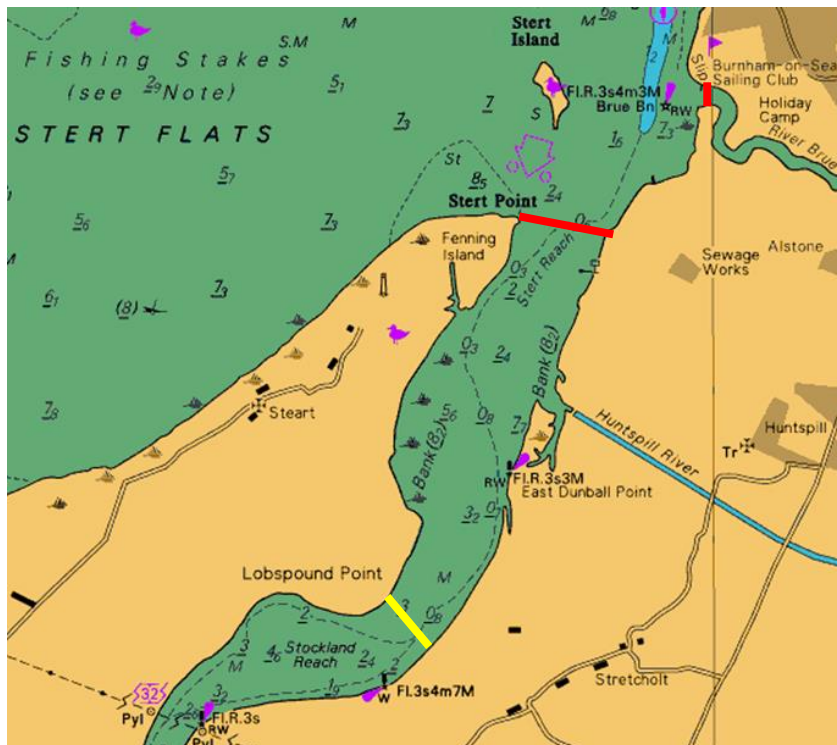
Very few survey respondents commented on the proposed closing line. One of the commercial fishermen completed an estuary questionnaire commenting 'don't know' regarding seine nets in the Severn and the proposed boundary change. He suggests 'it'll move fishing down channel' and his 'drift netting for herring would be outside of red line'.

One recreational angler supported the proposal and also gave a reason, whereas the majority of the previous respondents did not. He stated 'I used to fish these areas regularly but of late too many blanks have made me travel to other regions.' It'll provide an 'increase in visitors/ spending benefiting all aspects of local land based business, plus charter angling boats.

A recreational netter with a self-confessed vast knowledge of the tidal currents stated the boundary is unnecessary as the Severn 'ain't got no sand eels' and stated it would be advantageous to move it and place it from Flat Holm to Clevedon. When asked how many fishermen this would benefit he said, just him enabling him to fish Tail Point and North of Sand Bay for mullet, as he did before the fixed engine byelaw. It's 'a heritage thing and he cannot see the point of moving it (the proposed boundary line), it should be removed.'

- **River Parrett estuary**

Drift netting using the Somerset Flatner is undertaken in the mouth of the River Parrett all year depending on the conditions. It is seen by the fishermen as a sheltered location when the weather is too inclement to fish in the estuary. They fish for mullet, codling, whiting, flounder and bass. Within the proposals to only issue permits to seine net for sand eels in estuaries, this fishing activity could continue but only in the Severn estuary. This caused concern amongst the fishermen due to the limited opportunities this would present. A recreational netter has marked on the chart his suggested closing line, shown below in yellow. Officers believe the river is an important area for juvenile bass after viewing Hinkley power station data and receiving reports from elver netsmen.



Red lines denote D&S IFCA proposed estuary closing lines. Yellow line denotes a netters suggestion of the closing line.

When asked about the Brue closing line the recreational netters said the boundary is OK as the Brue is unsuitable for any type of netting as it is too silty, full of rubbish in and is often used by recreational anglers. They said we could issue permits for sand eel seines but it would be unlikely anyone would apply for one. This was echoed inside the main Severn estuary proposed closing line across Sand Bay as they claimed 'there are no sand eels here, there is no benefit in allowing sand eels seine nets'.

- **River Axe estuary**

The aforementioned recreational netters had a limited knowledge of the Axe estuary they suggested to reduce the boundary closing line in order to allow netting to occur within the sheltered bay. A recreational netter said the position of the proposed Axe boundary 'line is irrelevant, there is nothing to gain or lose by moving it.' A commercial netter that fishes in the mouth of the Axe, in his response he writes 'the red line is much too long, it should be across the mouth, and not at the angle proposed. His suggested line is shown in black pen below. He writes the 'area (behind the red line) that couldn't be fished would restrict my income. 'It would greatly disadvantage my livelihood if this proposal was accepted' but he does not provide any financial figures. However he was responding using the questionnaire from week 1 which did not have financial ranges included in the questions.



Proposed and suggestion boundary line in the River Axe estuary

Officers spoke to recreational anglers who fish along the banks of the Axe and at the mouth who claimed the area is important for thornback rays, flounder and bass.

With so many fishing methods in use in the Severn estuary, many of which are unlikely to continue once the current fishermen cease operating, officers suggest a different approach is adopted (compared to the south coast in the District) when the sub-committee consider what management measures to adopt. There is a strong argument for the retention of the heritage value versus the importance of the whole Severn estuary as a fish nurse area.