12 Recreational Fishing

12.1 Introduction

There are numerous recreational activities that utilise the waters around Guernsey, but due to it being and island nation recreational fishing is an especially large use of the resource. As such it has been decided to dedicate a chapter to recreational fishing to run alongside the commercial fisheries chapter.

Most, if not all, of the waters in the Study area are at some time fished recreationally, however some specific points are fished to greater extent than others. The effects on both the target species, and the recreational fishers are discussed in this chapter.

12.2 Baseline Environment

12.2.1 Identification of Recreational Fishers

This is a large but disparate group of individuals consisting of leisure and sport anglers, hand-liners, snorkel and scuba divers, amateur potters, trotters, netters and long-liners, operating both from the shore and afloat, and shore-gatherers. In many cases the same individuals will fall into more than one or even many of these groups, and as a result it is very difficult to quantify the numbers of people actively involved in these traditional activities.

Nevertheless it is fair to say that, taken as a group, these individuals represent a significant area of economic activity, directly and indirectly supporting many aspects of the Island's retail and service industries, and contributing to public funds. For example, there are an estimated 5000 plus small craft based in Guernsey alone, ranging from kayaks to cruisers, RIBs to racing yachts, dinghies today cruisers. Many of these will at some time or other engage in recreational fishing activities, even if only towing a set of mackerel feathers whilst in transit to the next port. There are also shore based rod and line anglers and they can be numbered in their hundreds, whilst the number of active shore-gatherers is probably similar.

Within each of the activity groups there is a very wide range of participation levels, ranging from the very occasional to the virtually obsessive, so again this presents almost insurmountable difficulties in calculating the actual levels of fishing effort, or indeed the effect this might have on stocks. However, all the groups are linked by certain common factors, which make it possible to construct a cohesive broad response to the perceived impact of the various methods of renewable tidal energy.

12.2.2 Target species

Recreational Fisherman target many different species for different reasons. Fishing for the pot is still the most important of these, closely followed by bait gathering, and for many anglers sport is the prime motivator, with catch and release increasingly practiced. Different fishing methods allow targeting of different animals, as outlined below:

- Shore gatherers target many species at various times of the year with Ormers, shrimps (prawns) cockles, razor clams & other edible molluscs, various edible crustaceans, sand eels and assorted marine worms being taken.
- Fixed fishing, with gear set from or close inshore, tends to be aimed at bass, wrasse, grey mullet and possibly conger, as well as crab and lobster.
- Divers can be much more selective in their catch, in which you would expect scallops, bass and various flatfish to feature strongly.
- Hand-liners tend focus on the free swimming round fish especially pollack, mackerel and bass.
- Anglers catch a huge variety of species by accident or design, the most relevant to this report being bass, breams, brill, mackerel, pollack and turbot. Anglers also catch and consume large quantities of sand eel, as the preferred bait for most of these species.

12.2.3 Areas Targeted by Recreation Fishers

To a greater or lesser extent a combination of seasonal availability of stock, preferred fishing method and the target species will determine the choice of fishing area for the recreational fisher. For the most part the activities of all recreation fishers are **limited** by:

- Their local knowledge of and means of access to the areas they fish
- The amount of free time available
- The effects of tides, seasons and weather
- The quality of equipment available (including size, range and seaworthiness of craft)
- The financial resources at hand to support their chosen activity

Consequentially the vast majority of these activities will normally take place within a short range of the operator's home base and often fairly close to shore. Just about any area of sea within a mile of land will almost certainly be considered by someone as their "home patch".

Clearly, considering that virtually all non-tidal, secure, year round moorings are located on the East coast, and this is also the area providing the most shelter from prevailing winds, there will be a more intense level of boating activity focussed on the Little Russell, the Great Bank and to a lesser extent those areas around Herm and Sark. However, with the exception of the very popular sand or gravel banks contiguous to the main islands, many of the areas of interest to the more serious recreational Fishers are actually beyond the scope of this document, and far more likely to be impinged upon by similar developments in waters elsewhere e.g. off Alderney or France.

12.3 Potential Effects

There is a potential for a number of effects on recreational fishing due to marine renewables, and not all of them may be negative. It is also important to note that due to the numbers of people participating in recreational fishing and fishing taking place in many areas throughout the Bailiwick all potential effects, any effects will only be felt by a reasonably small amount of the recreational fishing population.

12.3.1 Changes to Fish Numbers

Possible impacts on the biomass arising from placement of the devices will vary according to the actual areas chosen for deployment, and will also be to some extent dependant on the season when installation is undertaken. As well as this, the different stages of the lifecycle of the devices will likely have an effect as well.

During installation there is likely to be large amounts of noise created and sediment dispersed into the water column. This is going to drive animals away from the installation sites, and so would have a negative impact on fishing in the immediate area. However, there is the possibility that fishing in other areas could improve at this time due to the displaced fish moving to other regions still within the REA study area.

Changes to the tidal stream due to the devices may also have an effect on species numbers. This is because there is the potential for changes in tidal stream strength and direction to alter habitats, which in turn could alter the species composition within the Bailiwick. This could reduce the fishing opportunities for some recreational fishers, but increase the opportunities of others due to the changes in present species.

During operation of the devices noise levels and sediment dispersion should return to lower, more normal levels. There is the possibility that, having been displaced, the animals will not return to the area. There is also the possibility that the potentially higher noise levels of the operating devices may result as a deterrent to animals returning to the areas. However, experience of wind farms demonstrates

that new submarine structures tend to act as sheltered havens for smaller species, especially in strong tidal flows, and this can soon develop into a viable eco system (viz. wrecks). This could in turn become a positive outcome for recreational fishers.

12.3.2 Effects on Recreational Fishers

If exclusion zones are imposed surrounding construction areas in known fishing grounds there would be the possibility of reduced fishing opportunities for recreational fishers. How big and the type of effect this is depends upon where the devices are sited. If they are sited in an area of relatively low recreational fishing, then there is the possibility that fish numbers could be increased elsewhere (through displacement during construction) in the Bailiwick and so it could turn into a positive for recreational fishing. If development takes place in an area that is greatly used by recreational fishers then there could be a negative effect. Another potential negative effect of exclusion zones is in certain areas, such as the Little Russel, any exclusion zone could make navigation dangerous for small fishing boats trying to exploit around the area.

Other security measures such as buoyed marking, either of the exclusion zones or of device locations, could present further negative, and positive, effects. The potential negative effects would include the snaring and damaging of equipment. However, this could be countered with increased opportunities for recreational potters and divers around the moorings of the buoys.

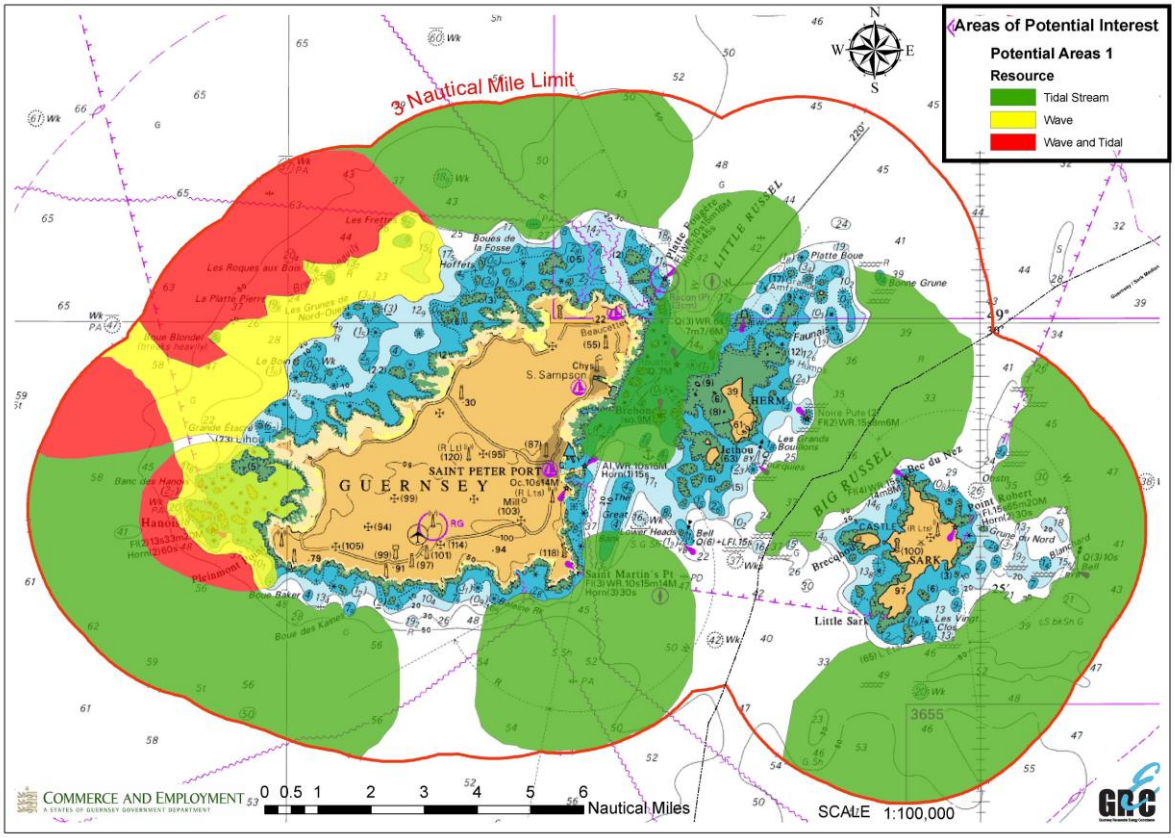
There could also be a potential impact to recreational fishers surrounding the landing points of electricity cables. There is the possibility that should the cables be landed at certain places around the coast there would be a reduction or loss of access to the shoreline. This would obviously affect shore gatherers, and as many people gather their own bait from the shoreline this could also have wider knock on effects on the fishing community.

12.4 Sensitivity of receptors

There are two key receptors to recreational fishing, that of the fishers themselves and that of the target fish species. However, any effect on the target species has a knock on effect on the recreational fishers, the magnitude of which would depend on how important the species is to the fishermen (how intensely fished). The main likelihood of sensitivity would be if fishing were interrupted in certain areas.

12.3.1 *How Provisional Zoning Interacts with Recreational Fishing Areas*

Figure 12.3.1 – Areas of potential Interest



It appears to be clear from the above that installation of any of the putative technologies will impact to some degree on one or more of the discrete recreational fishing groups. The effects of these impacts will vary depending on the chosen site(s), and until these are determined it is obviously difficult to cite specific and detailed effects that might ensue.

However there are some of the indicated areas of potential interest where the impact would undoubtedly be greatest and directly affect the largest numbers of recreational fishers. Figure 12.3.1, above, illustrates the initial attempt at identifying areas based on the available information regarding devices and resources taken from the Regional Environmental Assessment Scoping Report. Some of the areas highlighted have greater interactions with recreational fishing sites than others. In many ways the location of the deployment of devices is what will have the greatest baring on the likelihood that there will be impacts on recreational fishing. The areas of most likely impact are discussed below.

The inshore area off the South West corner of the island is shown as potential wave or wave and tidal resource, utilising the onshore technologies for wave

devices and the steep drop off for tidal devices. Development in this area would impact particularly on shore gatherers, shore anglers, angling and inshore traditional methods of fishing. It is understood that there are other significant factors relating to access, conservation, and tourism that weigh heavily against the use of this area for these devices (see chapter 16 for further details).

The area off St Martin's point, at the Southern end of the Great Bank is shown as having a potential tidal resource. This is possibly the single most accessible and therefore most heavily used offshore resource available to Recreation fishers. Often up to 40 or 50 boats can be found fishing there over a single tide when conditions are right. It is an important area where various species of baitfish (including sand eel, mackerel, pilchard and others) congregate in great numbers, attracting many predators as well as a variety of other marine creatures and seabirds to the area. As such the impact of marine renewables on this area would affect far more than just the recreational fishery (see chapter 11, Commercial Fisheries, for more details).

The Little Russel is another area is well used by recreational fishers, being easily accessible from all the east coast harbours and marinas. There are many angling opportunities in this area, as well as areas well used by line and pot fishermen. An added concern here is that to position an array of devices with associated navigational exclusion zones in an already constricted and very busy passage would significantly increase safety issues especially in high summer.

Part of the area identified off the west coast as a potential wave and tidal resource zone includes the Boue Blondel, which is notorious as a winter shoaling ground for spawning bass. Over recent years this area has been heavily exploited by both commercial and recreational fisherman, as well as by others whose activities fall somewhere between the two. Although there is presently a basic conservation measure in place banning pair trawling of the area, this particular spot could provide an opportunity for a win-win situation. An array positioned here with a total exclusion zone would help preserve bass stocks for future generations of fishermen, and not just here on Guernsey. In order for there to be no adverse effect on the fish species present, any work would have to be completed during the times of year when migration and breeding.

12.3.2 Reduced Access to Areas of the Sea

In many respects any scientific data presented is probably off less relevance to the archetypal recreational fisher than the common, and often very strongly held, view that free and unfettered access to these activities and the waters in which they take place is the Guernseyman's birthright. For many the right to enjoy their maritime heritage is an integral and defining attribute of the true Guern.

As the island has become more populous and built-up, the marine environment is becoming increasingly important as a leisure resource for local people, and also one of the defining characteristics of the island as a visitor destination. These

important aspects must also be taken into account, and are covered elsewhere in this report under Tourism and Social aspects.

12.5 Potential Significance of Effects

Table 12.5.1 below seeks to quantify these key concerns in terms of the standard Environmental Impact Significance Criteria. Recreational fishing is considered to be of a Regional value.

Table 12.5.1 – Potential Significance of Effects

Impact	Category	Duration	Effects	Receptor	Significance
Displacement - Controlled Access/Navigation Zones	Direct	Long Term	Reduced or less safe access to fishing grounds. Increased travel times & consequent fuel usage	Recreational Fishers	Moderate
Cable Landing Zone	Direct	Long Term	Possibility of Reduced or No access to shoreline for all users	Recreational Fishers	Moderate
Security Measures	Direct	Long term	Access denied	Recreational Fishers	Moderate

12.6 Likelihood of Occurrence

Due to the large areas fished by recreational fishers there will undoubtedly be some impact on the recreational fishing community. The effects will vary depending upon where the devices are deployed, but judging from the revised information in the Marine Processes Chapter (see Chapter 5), there is unlikely to be an overlap of the deployment sites with the key sensitive areas stated in 12.3.1. The main possible overlap is the Boue Blondel off the west coast of Guernsey, where there is the likely possibility that wave devices would be situated. This will become more clear once further investigative work into the wave climate, with the possible use of a wave rider buoy, identifies the wave climate present.

12.7 Mitigation Measures

Table 12.7.1 below highlights the potential mitigation measures relating to the impacts stated above.

Table 12.7.1 – Mitigation Measures

Impact	Category	Duration	Effects	Receptor	Significance	Mitigation Measures suggested
Displacement - Controlled Access/Navigation Zones	Direct	Long Term	Reduced or less safe access to fishing grounds. Increased travel times & consequent fuel usage	Recreational Fishers	Moderate	Reduced, modified or no restrictions for small vessels
Cable Landing Zone	Direct	Long Term	Possibility of Reduced or No access to shoreline for all users	Recreational Fishers	Moderate	Avoid landing in areas that are majorly used by recreational users
Security Measures	Direct	Long term	Access denied	Recreational Fishers	Moderate	Deploy in areas of relatively low fishing intensity

12.8 Confidence and Knowledge Gaps

The possible effects of construction, operation, maintenance and decommissioning renewable energy arrays are by no means clear, and there would appear to be very little hard scientific evidence to work with to either identify or confirm or dispel any concerns that might arise. This is mainly due to the embryonic nature of the marine renewables industry, with the exception of offshore wind which for the most part has the functioning part out of the water and so is not directly comparable. It must be acknowledged that, insofar as other types of offshore or submarine installations are concerned (fuel platforms, fortifications, breakwaters and even shipwrecks), the overall benefits to the species targeted by the recreational fishers would appear to far outweigh any short term or perceived local difficulties occasioned by either construction, operational activities, navigational exclusion areas, pollution or maintenance. But again it is important to acknowledge that the overall effect of moving submerged parts is still a relative unknown.

This leads to realistically low confidence on the prediction on all activities that affect the target species, which in turn has knock on low confidence on how recreational fishers will be affected. What is of higher confidence is where the effects impact on the recreational fishers only, the confidence for predicting these effects can be considered good.

There are three key knowledge gaps on how recreational fishers will be affected that will need addressing in some form:

- Long term effects on tidal flow and sediment dispersal
- Noise pollution
- Electromagnetic emissions (especially from cables).

12.9 Residual Effects

Table 12.9.1 – Residual Effects

Impact	Category	Duration	Effects	Receptor	Significance	Mitigation Measures suggested	Residual Significance
Displacement - Controlled Access/Navigation Zones	Direct	Long Term	Reduced or less safe access to fishing grounds. Increased travel times & consequent fuel usage	Recreational Fishers	Moderate	Reduced, modified or no restrictions for small vessels	Minor
Cable Landing Zone	Direct	Long Term	Possibility of Reduced or No access to shoreline for all users	Recreational Fishers	Moderate	Avoid landing in areas that are majorly used by recreational users	Minor
Security Measures	Direct	Long term	Access denied	Recreational Fishers	Moderate	Deploy in areas of relatively low fishing intensity	Minor

12.10 Recommendations for Survey and Monitoring

Surveys used to monitor sediment dynamic changes and noise pollution would be needed to be completed. These are covered more fully in chapters 4, 5 and 17. Pre and post deployment monitoring of fish levels around the areas of devices, and the surrounding areas, needs to be completed to understand fully the effects of marine renewables long term on the target species numbers.