Brightlingsea Harbour Commissioners

Personal Watercraft (PWC) Pontoon Environmental Statement

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EXO Environmental

Personal Watercraft (PWC) Pontoon, Environmental Statement.

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Executive Summary

Historically, Personal Watercraft (PWC) (specifically jet skis) communities have gained a reputation for being a source of disturbance and disruption within the coastal zone and are commonly viewed as a nuisance activity.

In contrast to previous management approaches, Brightlingsea Harbour intends to actively welcome PWCs to use their facilities and providing safe and easy access to the marine environment for PWC users. As part of this approach, the BHC aim to install a designated PWC pontoon alongside existing mooring facilities for recreational vessels.

The aim of this approach is to encourage adherence to the lawful use of the local waterways and incentivise peer-led management of PWC activity. As a result, it is anticipated that management of the PWCs by Brightlingsea Harbour will require less resource, with additional benefits for social inclusion and support of the local, rural economy. This novel approach is being monitored as a case study example of peer-led management by the Royal Yachting Association (RYA).

This environmental statement has been produced, to support the application for a marine licence for the installation and use of this designated PWC pontoon facility, described herein. Personal Water Craft are predominantly used during the summer, and hence the pontoon would operate during the summer season only. The report summarises the potential economic, social and environmental impacts of the PWC pontoon on the surrounding area and where deemed necessary, suggests mitigation and management options aimed at minimising potential negative impacts as far as practically reasonable.

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1. Introduction

1.1. Background

Brightlingsea is located in the Tendring District of Essex and the Harbour is situated on Brightlingsea Creek, as part of the wider Colne Estuary (Figure 1).

Brightlingsea has a long maritime history and is a member of the Cinque Port Confederation. Brightlingsea Harbour is the managing authority and was established as a Trust Port by Act of Parliament in 1927.

The Brightlingsea Harbour Commissioners (BHC) are responsible for the safe and efficient operation of the harbour, providing services for commercial shipping and recreational water-based activities, with associated shoreside infrastructure and services supporting; commercial shipping, nearshore renewable energy (wind), commercial fisheries, recreational water-based activities and tourism industries.

The BHC aim to "retain the character of the harbour", whilst achieving the following objectives:

i. Ensure sufficient water depth is established and maintained,

ii. Maintain a similar diversity and quantity of moorings,

iii. Establish a dedicated area for visiting boats,

iv. Identify gaps in services and, where appropriate, provide these services through collaboration or independently,

v. Work towards achieving relevant quality standards (e.g. ISO, Eco Port),

vi. Establish and maintain financial model which ensures sustainability, phased capital equipment replacement and a regular maintenance schedule,

vii. Maintain and build strong working relationships with all harbour users and stakeholders,

viii. Provide value for money, and

ix. To maintain, protect and enhance our natural environment.

1.2. Personal Watercraft (PWC)

Personal watercraft (PWC) is one group that exists under the umbrella of recreational water-based activities. For the purposes of this report, PWC refers specifically to the use of jet skis.

Historically, jet ski communities have gained a reputation for being a source of disturbance and disruption within the coastal zone and are commonly viewed as a nuisance activity. This has manifested itself through recurring issues with waterway managers and bans of personnel and use of equipment.

There is an internal recognition of this stereotype within PWC clubs, with efforts being made to improve the image and reduce the impacts of jet skis within the marine environment.

As part of the BHC objectives (ii, iii, iv, vi, vii, viii and ix), Brightlingsea Harbour is working closely with the local PWC community to establish and trial a peer-led management system of PWC activity within Brightlingsea Creek and the wider River Colne Estuary.

In contrast to previous management approaches, Brightlingsea Harbour is actively welcoming PWCs to use their facilities and providing safe and easy access to the marine environment for PWC users. The aim of this approach is to encourage adherence to the lawful use of the local waterways and incentivise peer-led management of PWC activity. As a result, it is anticipated that management of the PWCs by Brightlingsea Harbour will require less resource, with additional benefits for social inclusion and support of the local, rural economy. This novel approach is being monitored as a case study example of peer-led management by the Royal Yachting Association (RYA).

As part of this approach, the BHC aim to install a designated PWC pontoon alongside existing mooring facilities for recreational vessels. This environmental statement has been produced, to support the application for a marine licence for the installation and use of this designated PWC pontoon described herein. Personal Water Craft are predominantly used during the summer, and hence the pontoon would operate during the summer season only. The report summarises the potential economic, social and environmental impacts of the PWC pontoon on the surrounding area and where deemed necessary, suggests mitigation and management options aimed at minimising potential negative impacts as far as practically reasonable.

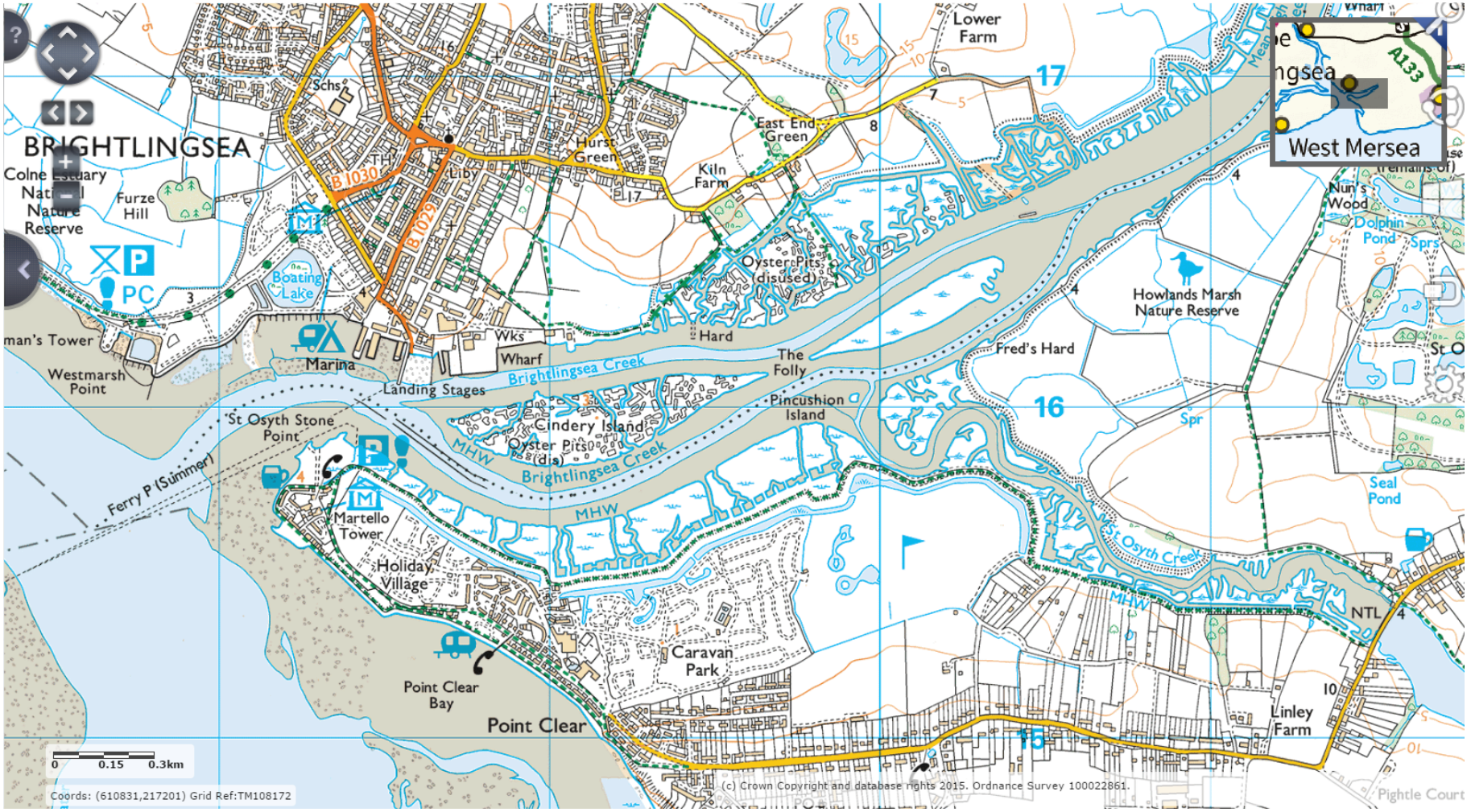

Figure 1. Brightlingsea Creek, (Source: www.magic.gov.uk. Accessed: 05/06/2018).

2. Proposed Works

2.1. Overview

The location of the proposed pontoon is shown in Figure 2 (satellite image) and figure 3 (Image of site).

The proposed pontoon is approximately 150m^2 in size and will provide twenty four (24) jet ski berths and an additional single (1) berth for a designated safety vessel that will accompany the PWC community and will also provide a base for peer-led management activities, see detailed design, figure 4.

Currently PWC users launch and retrieve their vessel every time they want to use it. This could occur in areas where there is no control, safety procedures or where it causes damage to the natural environment.

Figure 2. Brightlingsea Creek, (Source: www.gridreferencefinder.co.uk. Accessed: 11/06/2018).

Figure 3. Brightlingsea Creek, site photo low tide.

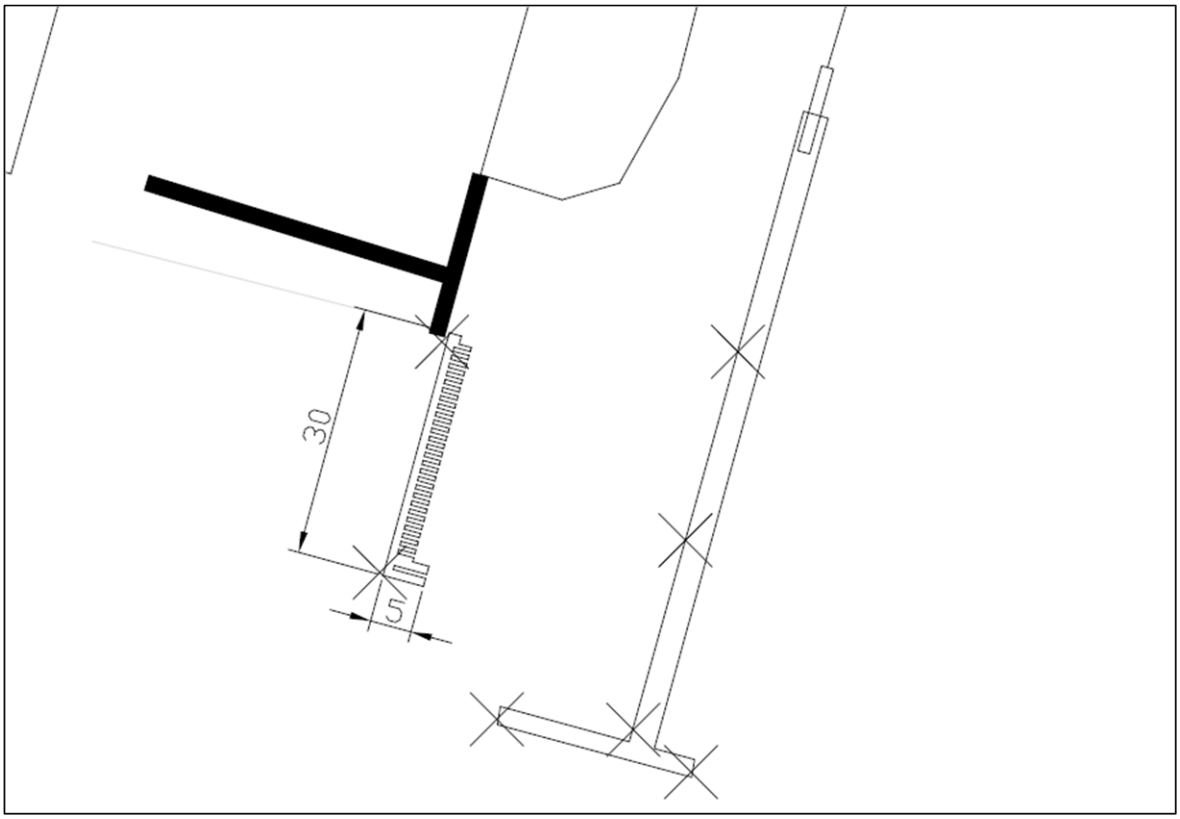

Figure 4. PWC pontoon detailed design.

The pontoon will be comprised of a modular “Drive on Dock” floating pontoon system, made of a robust, high performance plastic (high density polyethylene (HDPE)) with nylon connections, designed for rugged use in the marine environment. Many examples currently exist on the market (Figure 5) and offer safe and easy access, egress and maintenance of jet skis.

Figure 5. Example of a "Drive on Dock" floating pontoon system for use by PWCs (Source: www.versadock.com. Date Accessed: 06/06/2018).

2.2. Installation

The pontoon will be delivered in modules and constructed on the Town Hard during a period of low water by the appointed contractor. During the following high-water period and with the supervision of trained and experienced harbour personnel, the pontoon will be floated into position at slack water to improve manoeuvrability and control, before being secured in the proposed location.

The pontoon will be positioned between the two existing piles as per drawings and site photo. It will be secured and fixed between the existing piles and follow the tidal movements in its natural cycle of ebb and flood. Additional anchors will be deployed in the centre to provide additional security considering dominant ebb and flood flow direction. The anchors will be standard mooring anchors (mud weights) and chains, conventionally used for mooring vessels in the harbour. The anchor and chain will be removed when the pontoon is not present.

2.3. Operation

The “Drive on Dock” system ensures safe access and egress to and from the water, whilst the mooring reduces wetting of the PWC hull, thereby reducing maintenance such as the use of antifoulants. Maintenance of the pontoon itself only requires the use of a pressurised water hose, thereby negating the need for chemical cleaning and/or treatment of materials susceptible to degradation.

2.4. Summer season

The PWC pontoon will be operated during the summer season, the start and finish of this period is very much reliant on the weather as for most water sports. We envisage the pontoon to be in operation during a good season from April through to October. Whilst in a poor season this might be reduced to June – September.

2.5. Winter season

When the PWC pontoon is not in use (Winter season) this will most likely be stored out of the water in a designated storage park. The pontoon is modular and can therefore be easily disassembled into manageable parts and stored in one of the many boat parks in Brightlingsea.

An alternative option that we would like to retain is to store the PWC pontoon along on of the existing pontoons in the South Channel of the Harbour. These pontoons are often not in high demand during the winter and hence safe and appropriate storage could be organised in the South Channel. The pontoons in the South Channel are also owned by the Harbour Commissioners.

2.6. Marine Policy Statement

We’ve referred to the Marine Policy Statement in order to consider issues linked to PWC activities (Tourism). The PWC project and pontoon installation supports the PWC users who currently launch and retrieve their vessels, and make use of the coast already. The PWC pontoon and PWC Club are aimed at establishing a community where peer led management to reduce anti-social behaviour and education. This includes consideration for the natural environment. Considering the benefits to socio-economic aspects, physical and metal wellbeing, the PWC pontoon is considered a positive contribution to the Harbour.

3. Social Impacts

3.1. Air Pollution

As jet ski propulsion is generated through fuel combustion, their emissions are a source of air pollution and contribute to greenhouse gas (GHG), pollutant and particulate emissions. According to the National Atmospheric Emissions Inventory (NAEI, 2018), in 2015 PWCs (1A3d, Domestic Navigation) contributed 137kT of GHG to the national emissions total of 496Mt (carbon dioxide, CO_2 equivalent), representing 0.02% of the national carbon budget (BEIS, 2017).

Whilst the use of PWCs will result in an increase in localised air pollution, due to; the limited number of additional berths and size of the local PWC club and the existing level of activity and associated sources of emissions within the local area, additional impacts arising from the pontoon installation and PWC operation are not considered significant.

3.2. Noise Pollution

Noise pollution is one of the main negative impacts typically associated with PWCs. Whilst the installation of the PWC pontoon is not anticipated to have a significant impact, the operation of PWCs will likely contribute to local noise pollution, as would be expected.

However due to; the limited number of additional berths and size of the local PWC club, the existing level of activity within the harbour and through adherence to lawful use of the local waterways, the potential impacts on noise pollution associated with the proposed works are not considered significant. Potential impacts will be further mitigated through the novel peer-led approach being trialled. This approach will be supported through open communication between Brightlingsea Harbour and all water users.

3.3. Visual Pollution

As described in Section 1, Brightlingsea is a coastal town and a busy recreational and commercial harbour with marine-related infrastructure such as pontoons, swinging moorings, marinas present throughout Brightlingsea Creek and the wider Colne Estuary.

The PWC pontoon to be installed is a modern aesthetically pleasing design, whilst the proposed location is adjacent to an existing marina facility (Waterside Marina) and high-end apartment complex. Additionally, recreational and commercial vessels are in high abundance and in close proximity to the pontoon and present throughout Brightlingsea Creek and the wider Colne Estuary. Consequently, the visual impacts

arising from the pontoon installation and operation of PWCs are not considered significant.

3.4. Cultural and Heritage Impacts

No cultural or heritage assets (e.g., wrecks, protected monuments etc.) are located within the proposed PWC pontoon location. Whilst a number of wrecks exist throughout Brightlingsea Creek and the wider Colne Estuary, these represent navigational hazards and are identifiable at all states of the tide. Consequently, no cultural or heritage impacts are considered significant.

3.5. Navigation

The BHC are responsible for safe navigation within the local area. To achieve this, the harbour maintain navigational markers, manage and coordinate all water users, enforce speed restrictions, maintain open VHF radio communications and have an active maintenance dredging program in place, in order to maintain sufficient water depths within the main channels.

The proposed location of the PWC pontoon exists in an area that is accessible by water during a typical mid- to high- tide period and lies adjacent to an existing marina facility. As part of the pontoon installation, new navigational markers will also be installed to ensure safe access and egress to and from the pontoon to the main approach channel.

Installation of the pontoon will pose a temporary risk to navigation as the structure is moved into position, but will be managed and coordinated by a trained subcontractor and supervised by experienced harbour personnel.

With an increase in the number of vessels using the navigation channels and surrounding waterways, there is an increased risk of collision. However, due to; the limited number of additional berths and size of the local PWC club, the existing level of activity within the harbour and through adherence to lawful use of the local waterways, the potential threats to navigation associated with the proposed works are not considered significant.

3.6. Oyster Fishery

Designated Shellfish Waters (Reference: 17, Colne_E) and Classified Bivalve Mollusc Harvesting Areas (Hard Clam, *Mercenaria mercenaria* and Pacific Oyster, *Crassostrea gigas*) exist throughout the Colne Estuary and support local oyster fisheries.

The proposed location of the PWC pontoon does not compromise the local fishery due to its proximity to infrastructure (i.e., the area is not fished) and unsuitable habitat for the local oyster populations (intertidal).

During the operation of PWCs, there is the potential for collision with local oyster beds during periods of insufficient water depth and commercial fishing vessels. However, potential threats to the oyster fishery associated with the proposed works are not considered significant.

Potential impacts can be mitigated through; the correct operation of equipment, adherence to local speed limits, the use of managed navigation channels and open radio communications.

4. Environmental Impacts

Due to the quality and extent of the local habitats and the rich biodiversity they support, a number of environmental designations exist in the local area. Consequently, an assessment of the impact of the installation and operation of the PWC pontoon on the qualifying features is warranted. Existing designations are listed below with additional information including spatial extent and qualifying features provided in Appendix 1:

- Blackwater, Crouch, Roach and Colne Estuaries Marine Conservation Zone (MCZ),
- Colne Estuary (Mid Essex Phase 2) Special Protected Area (SPA),
- Essex Estuaries Special Area of Conservation (SAC),
- Colne Estuary Site of Special Scientific Interest (SSSI), and
- Colne Estuary (Mid Essex Phase 2) Ramsar Site.

4.1. Biology

4.1.1. Native Oyster (*Ostrea edulis*), Species and Beds

Native oyster populations exist throughout Brightlingsea Creek and the wider Colne estuary, with an existing oyster bed located along the northern boundary of the main approach channel into Brightlingsea Creek (located 250m to the west). As described in Section 3.6, these populations are fished commercially.

The proposed location of the PWC pontoon does not exist in an area where native oyster (*Ostrea edulis*) populations exist and will therefore not impact on the species or their beds directly. The use and operation of PWCs could result in direct and indirect impacts to native oysters and their beds, through collision at periods of insufficient water depths or issues relating to water pollution. However, due to; the limited number of additional berths and size of the local PWC club, the existing level of activity within the harbour and the disturbance caused by fishing activity, these impacts are not considered significant.

4.1.2. Birds

Birds listed as qualifying features under the local SPA, SSSI and Ramsar designations are observed throughout Brightlingsea Creek and the wider Colne Estuary, according to their seasonal distributions (e.g., resident, overwintering, summer breeding).

Personal Water Craft are predominantly used during the summer, and hence the pontoon would operate during the summer season only. The proposed location of the PWC pontoon exists in an area of low quality habitat and subject to high activity and is deemed to be of low importance for resting, foraging and/or nesting by birds.

Installation will occur during as soon as possible to achieve economic benefits from the 2018 summer season. However, due to the lack of suitable nesting habitat between the Town Hard (site of pontoon mobilisation) and proposed location and the temporary nature of the installation works, no significant impacts on the summer breeding success of the local bird populations is anticipated.

The operation of PWCs throughout Brightlingsea Creek and the wider Colne Estuary has the potential to cause disturbance and displacement of the local populations. Previous bird monitoring undertaken during the BHCs active dredging and restoration project under the EU initiative "Using Sediment As a Resource (USAR)" (marine licence: MLA/00362/2016), found that disturbance impacts arising from activities in the marine environment are dependent on the type, frequency and proximity of the disturbance to bird populations. The arising displacement was found to be dependent baseline levels of activity, species and their life history traits and the availability of alternative habitat. In general, disturbance occurred at distances less than 100m resulting in a "within creek" displacement of less than 500m with a duration of 5min or less.

Based on the findings of previous monitoring campaigns and due to; the limited number of additional berths and size of the local PWC club, the existing level of activity within the harbour and quality an extent of alternative habitats present in the surrounding area, the additional impacts on birds arising from the proposed works are not considered significant. Furthermore, the installation of a designated facility will control and localise potential impacts, thereby reducing potential disturbance arising from the launching and recovery of PWCs from areas more susceptible to the disturbance of birds.

Potential impacts can be mitigated through; adherence to local speed limits, the use of managed navigation channels and education and awareness of existing designations.

4.1.3. Vegetation

The proposed location of the PWC pontoon exists in an area of intertidal mudflat with little or no vegetation cover and is deemed to be of little ecological value. Consequently, the impacts of the PWC pontoon and operation of PWCs on vegetation at the proposed location are not considered significant. However, a range of vegetation and invertebrate species are protected within the local area, but due to their intrinsic association with saltmarsh habitat, these potential impacts are discussed in Section 4.2.3.

4.1.4. Biosecurity

The movement of plant, equipment and personnel can create threats to biosecurity by facilitating the spreading and establishment of diseases, invasive non-native

species (INNS) and native pest species to, from, or within sites. Table 1 summarises the known biosecurity risks of relevance to the proposed works.

*Table 1. A summary of known biosecurity risks known to currently exist within, or in the area local to Brightlingsea Creek. * = predominantly freshwater species but can tolerate brackish conditions.*

Species		Type		
Common Name	***Scientific Name***	**Disease**	**INNS**	**Native Pest**
Bonamiasis	*Bonamia ostreae*	√		
Pacific Oyster	*Crassostrea gigas*		√	
Slipper Limpet	*Crepidula fornicata*		√	
Smooth Cordgrass	*Spartina alterniflora*		√	
Chinese Mitten Crab	*Eriocheir sinensis*		√	
Zebra Mussel *	*Dreissena polymorpha*		√	
Signal Crayfish *	*Pasifasticus leniusculus*		√	

Of these, the presence of the PWC pontoon is not considered to pose a threat to biosecurity. However, the pontoon installation process and the launching and recovery of PWCs that have been, or will be used in other locations do present a potential pathway for the spreading of species of concern.

To mitigate against threats to biosecurity during the pontoon installation and use of PWCs, standard check-clean-dry (CCD) biosecurity measures will be followed and encouraged through education and awareness. A designated PWC pontoon will further reduce biosecurity threats through a reduced frequency of PWC launching and recovery.

4.2. Geology and Habitats

Protected habitats include intertidal mudflats, saltmarsh and sandbanks that are permanently slightly covered by seawater. The Clacton Cliffs and Foreshore is protected under the MCZ designation, but is not deemed relevant to the proposed works due to its distance from the site.

4.2.1. Intertidal Mudflat and Submerged Shallow Sandbanks

The proposed location of the PWC pontoon exists in an area of intertidal mudflat and will directly impact an area of approximately 150m^2 during periods of low water. However, this area is considered to be of low ecological importance, whilst extensive mudflats exist throughout Brightlingsea Creek and the wider Colne Estuary, with Essex Estuaries SAC covering an area of over 46,000ha, of which 56.5% is comprised of "tidal rivers, estuaries, mudflats, sandflats and lagoons (including saltwork basins)" (JNCC, 2016).

The operation of PWCs may impact localised areas of intertidal mudflat through the generation of vessel wakes, prop wash and through physical impact during launching and recovery or scour if operated in insufficient water depths. However these impacts are not considered significant. Furthermore, the installation of a designated facility will control and localise potential impacts, thereby reducing potential disturbance arising from the launching and recovery of PWCs from unsuitable areas that may result in greater impacts to intertidal mudflat (e.g., shallower mudflat gradients will extend any scour marks created during launching and recovery).

Potential impacts can be mitigated through; adherence to local speed limits, the use of managed navigation channels and the operation and correct use of equipment for the launching and recovery of PWCs to and from the Town Hard.

4.2.2. Intertidal Mixed Sediments

The nearest examples of intertidal mixed sediments are the Town Hard and Cindery West foreshore, located 50m and 250m to the east respectively. The Town Hard is a man-made area comprised of natural silts and clays, underlying gravels that have been deposited and compacted to provide an area of hard standing to aid safe access and egress to and from the water. This area is subject to high activity and is deemed to be of low ecological importance. Cindery West foreshore is an area of intertidal mixed sediments approximately 80x300m (2.5ha) in size extends north from the foreshore of Cindery West Island. This area is considered of higher ecological value due to reduced activity. However, it is subject to impacts from vessel activity (e.g., vessel wake and prop wash) and is located within the turning circle of vessels up to 110m in length that use the commercial wharf (Oliver's Wharf) adjacent.

The proposed location of the PWC pontoon exists in an area where the bed is relatively uniform and comprised of fine silts and clays, which dominate the majority of the sediments within Brightlingsea Creek and the wider Colne Estuary and will therefore not impact on intertidal mixed sediments directly. Due to the limited size of the pontoon, it is not considered to impact on intertidal mixed sediments indirectly through disruption to geomorphological processes. The use and operation of PWCs could result in direct and indirect impacts to these areas of intertidal mixed sediments, during the use of the Town Hard for launching and recovery of PWCs or through an increase in vessel wake and prop wash. However, due to; the limited number of additional berths and size of the local PWC club, the man-made nature of the Town Hard, the general low ecological value of both sites and the existing level of activity within the harbour, the additional impacts arising from the proposed works are not considered significant.

Potential impacts can be mitigated through; adherence to local speed limits, the use of managed navigation channels and the operation and correct use of equipment for the launching and recovery of PWCs to and from the Town Hard.

4.2.3. Saltmarsh

The nearest example of saltmarsh habitat is Cindery West Island, located 250m to the east. Consequently, the installation and proposed location of the PWC pontoon is not considered to significantly impact saltmarsh habitat directly or indirectly.

The operation of PWCs may impact local saltmarsh habitats through the generation of vessel wakes, which as a result of increased wave action, may contribute to erosive forces at the seaward face. With continued destabilisation and deterioration of the structural integrity of the underlying geology, subsequent erosion will result in a reduction of suitable habitat for colonisation by protected saltmarsh vegetation and associated species. The generation of prop wash and direct impacts resulting from collision may also occur when PWCs are operated in close proximity to the existing

saltmarsh, either intentionally or due to a lack of correct operation or control of the PWC.

However, due to; the limited number of additional berths and size of the local PWC club and the existing level of activity within the harbour, the additional impacts arising from the proposed works are not considered significant.

Potential impacts can be mitigated through; adherence to local speed limits, the use of managed navigation channels and education and awareness of existing designations.

5. Water Framework Directive (WFD)

The Water Framework Directive (WFD) (2000/60/EC) aims to protect, restore and enhance Europe's aquatic ecosystems.

The overall objective of the WFD is to achieve good status in all inland, transitional, coastal (out to one nautical mile) and ground waters based on a number of ecological and chemical parameters.

The impacts of works in the marine environment on WFD compliance are generally assessed against five (5) key receptors, namely; hydromorphology, biology (habitats and fish), water quality and protected areas.

A WFD assessment is undertaken to ensure that activities do not have a significant impact on the immediate water body and any linked water bodies and that the activity complies with the relevant river basin management plan (RBMP). Impacts on biology and protected areas are detailed in Section 11. Table 2 provides a summary of the current status of the water bodies of most relevance to the proposed works, according to the Anglian RBMP (EA, 2015).

Table 2. Current status of water bodies most relevant to the proposed works (EA, 2015).

WFD Water Body		Status				
Name	ID	Hydromorphological	Ecological	Chemical	Target	Current Overall
Blackwater	GB520503714000	Heavily Modified, Supports Good	Moderate	Good	Moderate by 2015	Moderate
Blackwater Outer	GB650503200000	Heavily Modified, Not assessed	Moderate	Good	Moderate by 2016	Moderate
Colne	GB520503713800	Heavily Modified, Supports Good	Moderate	Good	Moderate by 2017	Moderate

With regards to hydromorphology and water quality, due to the size of the PWC pontoon and the materials used in its construction, the pontoon itself is not expected to have a significant impact on the key WFD receptors.

During the installation of the pontoon and operation of PWCs, there is a potential for localised deterioration in water quality as a result of pollution events such as a fuel leak or spillage during refuelling. During installation, all equipment will be checked for cleanliness prior to use, whilst regular maintenance of all PWCs and following the CCD measures described in Section 4.1.4 will help minimise the potential for adverse impacts to water quality.

Due to; the limited number of additional berths and size of the local PWC club and the existing level of activity within the harbour, the additional impacts on water quality arising from the proposed works are not considered significant.

Potential impacts can be mitigated through; equipment checks for cleanliness prior to use during pontoon installation, regular maintenance and CCD measures for

PWCs, the correct use of equipment, the use of managed navigation channels, education, awareness and adherence to the harbour Ship Oil Pollution Emergency Plan (SOPEP) with adequate supplies of suitable cleaning equipment.

6. Waste Framework Directive (WsFD)

The Waste Framework Directive (2008/98/EC) sets the basic concepts and definitions related to waste management and aims to ensure that waste is managed without endangering human health and harming the environment, and in particular without risk to water, air, soil, plants or animals, without causing a nuisance through noise or odours, and without adversely affecting the countryside or places of special interest.

Any waste produced during the installation or use of the PWC pontoon or operation of PWCs, such as plastics, metals or liquid fuels will be disposed of accordingly through the facilities and processes provided by the Brightlingsea Harbour.

Due to; the limited number of additional berths and size of the local PWC club and the existing level of activity within the harbour, the additional impacts on waste and associated pollution arising from the proposed works are not considered significant.

Potential impacts can be mitigated through; regular maintenance and CCD measures for PWCs, the correct use of equipment and education and awareness.

7. Conclusion

The Brightlingsea Harbour Commissioners (BHC) aim to install a designated Personal Watercraft (PWC) pontoon alongside existing mooring facilities within Brightlingsea Harbour.

These works are part of a novel PWC management trial, aimed at encouraging adherence to the lawful use of the local waterways and incentivise peer-led management of PWC activity and is being monitored as a case study example of peer-led management by the Royal Yachting Association (RYA).

The proposed pontoon is approximately 150m^2 in size and will be a modular system made of a robust, high performance plastic (high density polyethylene (HDPE)) with nylon connections, designed for rugged use in the marine environment, providing twenty four (24) PWC berths and an additional single berth for an associated safety vessel.

The impact of the works proposed are not considered to be significant due to:

- The limited number of additional berths and size of the local PWC club,
- The existing level of activity and disturbance within the harbour,
- The low ecological value of the proposed PWC pontoon location, and
- The quality an extent of alternative habitats present in the surrounding area based on previous monitoring programs,

Impacts can be further mitigated through:

- Adherence to local speed limits,
- The use of managed navigation channels and installation of new navigational markers,
- Education and awareness of existing designations and harbour rules and processes,
- Equipment checks for cleanliness and regular maintenance of the pontoon and PWCs,
- The correct use of equipment and open radio communications, and
- The peer-led management approach being trialled.

The installation of a designated facility will localise PWC activity, which in conjunction with a peer-led management approach, is intended to create benefits associated with; reducing disturbance in other areas that may be more susceptible to social and environmental impacts, reduce the Brightlingsea Harbour management resources required, promote social inclusion and generate support for the local, rural economy.

8. References

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