

# Chesil Beach Protected Wreck Sites

May 2021



Historic England

# Conservation Statement and Management Plan



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## **Executive Summary**

The Chesil Beach Protected Wrecks consist of two discrete clusters of ships' guns located in a highly dynamic area close to Chesil Beach off the coast of Dorset. They are within the Chesil Beach and Stennis Ledges Marine Conservation Zone and the Chesil and The Fleet Special Area of Conservation. The sites were recorded in 2010 as part of a survey by the Shipwreck Project and reported to Historic England who commissioned an undesignated site assessment; they were subsequently designated under the Protection of Wrecks Act (1973) in 2017 as two sites of unknown identity.

The Inshore Site 1 appears to represent the remains of a merchant ship comprising nine English cannon of different sizes cast between 1650 and 1725, cannon fragments, areas of concreted iron shot, and fragments of worn worked wood. In addition, the presence of at least two more guns just inshore has been reported by the Shipwreck Project since the 2015 fieldwork.

The Offshore Site 2 also comprises the remains of a wooden sailing ship represented by eight very heavily concreted, probably English cast iron cannon, one of which was cast in the second half of the 17<sup>th</sup> century. It is likely that these larger 7ft guns were being carried as defensive armament and the identification of a possible iron shot in the mouth of the bore of one suggests that the gun was loaded.

This Conservation Statement and Management Plan has been produced to enable local and regional stakeholder involvement in the conservation management of the Chesil Beach sites, to balance both the sites protection along with economic and social needs. The principle aim of the Conservation Management Plan is to identify a shared vision of how these values of the Chesil Beach Wrecks can be conserved, maintained and enhanced for future generations.

The following management policies have been formulated in accordance with achieving this principal aim:

### **Management Policy 1**

We will seek to improve authorised visitor access to the protected wreck sites as a mechanism to enhance the value of the sites.

### **Management Policy 2**

We will seek to increase the interpretive material related to the sites, the wider marine historic environment and related protected habitats and species, at appropriate locations and through liaison with English Heritage properties, local museums and local stakeholders.

### **Management Policy 3**

We will maintain and develop the online virtual dive trail for the sites through updating content when new information becomes available.

### **Management Policy 4**

When projects are commissioned on the wrecks, we will seek to use the sites as a training resource where this is appropriate.

### **Management Policy 5**

We will seek to encourage the investigation and continued survey of the sites and the area around their known remains to establish the full extent of the sites.

### **Management Policy 6**

We will seek to commission a programme of assessment and research to contribute towards a fuller understanding of the sites.

Management Policy 7

We will seek to undertake historical research to explore the hypothesis of wrecks being the remains of the Dutch ship *De Hoop*, the *Squirrel* or any of the other identified potential candidate sites.

Management Policy 8

We will seek to undertake a programme of monitoring with particular consideration being given to the impact of diver activity and commercial fishing within the designated areas.

Management Policy 9

If the sites are confirmed as being of non-British origin then we will seek mechanisms to consider shared ownership and partnership with the relevant national authorities.

Management Policy 10

We will seek to ensure that unnecessary disturbance of the seabed within the restricted areas (by fishing and diving) be avoided wherever possible, in order to minimise the risk of damage to buried archaeological material.

Management Policy 11

We will seek to ensure that this management plan will be reviewed and updated on a regular basis so that it continues to reflect the conditions and state of knowledge pertaining to the sites. Should the identity of either or both sites be confirmed then they may require separate management plans in the future.

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## 1. Introduction

### 1.1. Background & Purpose

1.1.1. Wreck sites may contain the remains of vessels, their fittings, armaments, cargo and other associated objects or deposits and they may merit legal protection if they contribute significantly to our understanding of our maritime past. The Protection of Wrecks Act 1973 (PWA) allows the UK Government to designate, in territorial waters, an important wreck site to prevent uncontrolled disturbance. Although the National Heritage Act 2002 enabled English Heritage (now Historic England) to assist in costs relating to works under the PWA, the responsibilities of Historic England for the physical management of designated wreck sites must align with the Historic England strategic and research priorities.

1.1.2. This document seeks to set out a Conservation Statement and Management Plan for the Chesil Beach protected wrecks, two archaeological sites which are designated together under the PWA, lying off Chesil Beach, Dorset (Figure 1 - Location). The designation order under the Protection of Wrecks Act (1973) for the Chesil Beach Wreck Sites is dated 18<sup>th</sup> August 2017. The designated areas are a radius of 30 metres around the positions:

- Latitude 50°36.758489 N, Longitude 02°32.070084 W
- Latitude 50°36.651607 N, Longitude 02°32.059267 W

1.1.3. The Chesil Beach Wreck Sites are attributed to the National Heritage List for England (NHLE) under a single entry 'Unknown Wreck: Chesil Beach (Cannon Site)'. The List Entry Number is 1433972. <https://historicengland.org.uk/listing/the-list/list-entry/1433972>

1.1.4. Since discovery and designation, the sites together have collectively been known as the 'Cannon Sites'. However, they have individually been referred to variously, as set out in Table 1 as:

*Table 1 - Clarification of individual site references and appellations.*

Site	Alternative names/ references
Northerly (shallow) site	Inshore, Inner, Site 1
Southerly (deeper) site	Offshore, Outer, Site 2

1.1.5. This report uses the naming conventions of Inshore (Site 1) and Offshore (Site 2).

### 1.2. Aims and Objectives

1.2.1. The principle aim of this Conservation Statement and Management Plan is to identify a shared vision of how the values and features of the Chesil Beach Wreck Sites can be conserved, maintained and enhanced for future generations, whilst balancing conservation with economic and social needs.

1.2.2. This has been achieved through the following objectives:

- Understanding the Chesil Beach Wreck Sites.
- Assessing the significance of the Chesil Beach Wreck Sites.
- Identifying where the significance of the Chesil Beach Wreck Sites is vulnerable.
- Identifying policies for conserving the significance of the Chesil Beach Wreck Sites.
- Realising the public value of the Chesil Beach Wreck Sites.
- Identifying management policies.

### **1.3. Scope and Liaison**

1.3.1. Historic England (when English Heritage) sought to develop assessment methods to characterise the state of all designated historic assets and to understand their current management patterns, their likely future trajectory and how that can be influenced to ensure their significance is maintained for both present and future generations.

1.3.2. As early as 1995 the Archaeological Diving Unit (ADU) sought to determine factors affecting the stability of Protected Wreck sites (ADU 1995). This assessment considered the exposure of archaeological material, the probability of active degradation, site dynamics (energy) and sediment covering. It concluded that many of the sites designated under the PWA are actively deteriorating.

1.3.3. Subsequently Historic England sought to place an understanding of the physical stability of, and therefore risk to each designated wreck site against ongoing investigations, ease of access for visitors and potential for wider awareness. Methodologies were developed to allow for the systematic quantification of the resource and to set benchmarks for the monitoring of future change. A major component of this process comprises the identification of risks to historic wreck sites so as to provide a measure of how a site is likely to fare in the future (see Historic England, 2017).

1.3.4. More recently Heritage 2020 has set out how heritage organisations will work together to benefit the historic environment. It is coordinated on behalf of the whole sector by the Historic Environment Forum. The Historic England Corporate Plan (2020-23) details how strategic objectives will be delivered, considering the role of Public Value and how resource will be spent. The development of Conservation Statements and Management Plans assists with improving understanding of the significance and character of important wreck sites and ensuring they are included within HE priority areas and activities for heritage (Historic England 2020).

1.3.5. Practical measures that can conserve, maintain and enhance the values and features of the Chesil Beach sites identified as being at risk will be delivered through this Conservation Statement and Management Plan.

1.3.6. There are currently 54 wrecks designated in England under the Protection of Wrecks Act 1973, of which the Chesil Beach Wreck Sites are one. Access to the sites is managed through a licensing scheme and is subject to authorisation by the Secretary of State for Digital, Culture, Media and Sport (DCMS).

### **1.4. Authorship**

1.4.1. This document is based on the Historic England Standard for Conservation Statements for English Heritage Sites and draws on other similar plans for protected wreck sites.

1.4.2. This Conservation Statement and Management Plan has reviewed and referenced similar statements and plans drawn up for other protected wreck sites, this includes: Normans' Bay Wreck (Historic England/ NAS 2017), West Bay Wreck Site (Historic England/ Bournemouth University 2018) and Northumberland (1703) (Historic England/ Pascoe Archaeology 2020).

1.4.3. This Conservation Statement and Management Plan has been written by Julie Satchell and Brandon Mason (Maritime Archaeology Trust) and Mark Beattie Edwards (Nautical Archaeology Society). NAS and MAT were commissioned by Historic England in May 2019 (Historic England Project Number 7790) for the Chesil Beach Protected Wrecks Community Archaeology Project, the production of this plan formed part of that project.



## 1.5. Status

1.5.1. This is the second draft of the Conservation Statement and Management Plan, it has been subject to stakeholder consultation and revised in response to comments. Notes on its status and any subsequent revisions will be maintained.

## 2. Understanding the Chesil Beach Protected Wreck Sites

### 2.1. Historical Development of the Designated Sites

2.1.1. The two sites were recorded in 2010 during a side scan sonar (SSS) survey by a community archaeology organisation, the Shipwreck Project. The two SSS anomalies were ground-truthed by divers who reported that the guns on both sites appeared to be similar. Subsequently, in 2014, during another SSS survey, the Shipwreck Project recorded a section of wooden ship's structure near the two sites. It was considered possible that all three sites were the result of a single wrecking event.

2.1.2. The Shipwreck Project reported these sites to Historic England who commissioned Wessex Archaeology to investigate the area, including all three areas of wreck, in 2015 (Wessex Archaeology 2016). WA created photogrammetry surveys of the Inshore (Site 1) and Offshore (Site 2) sites, which were supported by direct measurements of individual site features. The site plans produced were based on photogrammetry and supplemented with side scan sonar data where there was no photographic coverage.

2.1.3. Research reported by Wessex Archaeology included a review of previous reports of wreckage in the area in addition to recorded historic ship losses. This revealed potentially relevant reported finds including an 18th century cannon and shot recovered from 100 yards off Chesil Beach in 1973, although this was a significant distance from the two sites under assessment. The recovered cannon now resides outside of the Underwater Explorers Dive Shop and has been recorded by photogrammetry. Further examination suggests this cannon dates to between 1620-35, making it unlikely that it was associated with either the Inshore Site 1 or Offshore Site 2.

2.1.4. An entry from the *Dive Dorset* guide (Hinchcliffe 1999: 96 as quoted in Wessex Archaeology 2016: 7) may be referring to the same site as the one where the cannon was recovered which is identified as the *Hope* or (*De Hoop*), a Dutch vessel lost in 1749 on Chesil Bank. It describes the site as being in 11m of water, 120 yards offshore, having 26 large iron cannon and having been subject to 'trial excavations' that revealed tobacco preserved below cannon and Dutch silver coins having been recovered. Imprecise records of the position of previous recoveries and investigations means these records provide an important broader context but at this time a direct comparison with the Inshore Site 1 and Offshore Site 2 is not possible.

2.1.5. Wessex Archaeology's report assessed the Inshore (Site 1) and Offshore (Site 2) sites, along with 'Site 3' the section of wooden hull, in accordance with Historic England recommended practice. The assessment determined that Sites 1 and 2 are likely to represent individual wrecking events due to the different character and dates of the cannon assemblages and that they are mostly likely to have been cargo vessels. The risk to both cannon sites was considered to be to be high, mostly from natural forces, although some human interference had been noticed (Wessex Archaeology 2016: 16). Both cannon sites were assessed against the non-statutory criteria for designation under the Protection of Wrecks Act 1973 and were protected under the Act.

2.1.6. The NHLE list entry for the sites draws on recorded losses from the National Record of the Historic Environment and outlines 25 potential candidate ships lost at Chesil between 1600-1780, of which seven date to between 1650-1733. The Order also mentions both *De Hoop* and the *Squirrel*, a British ship lost in 1750, as possible candidates for the wrecks, both of these ships are specifically recorded on the Isaac Taylor map of Dorset (Charmouth Local History Society) which due to its date

of 1765 would have been produced relatively soon after the wrecks occurred and might have benefited from local knowledge.

2.1.7. The NAS worked with the site licensees (from the Shipwreck Project team) and undertook underwater surveys on the two wreck sites in 2018 as part of an NAS member diver training project. There was concern that the dynamic nature of the seabed would have drastically altered the sites and either exposed or buried them. This was not the case and the sites were exposed to a similar level as in 2015. The focus of this fieldwork was providing training and skill development opportunities for NAS members and therefore the results of this fieldwork can be considered as a monitoring survey. The only new information that was gathered during this fieldwork was the result of a swim line search of the 300m between the two sites. This proved that there are no surface finds in a 6-8m transect from the Inshore Site 1 south to the Offshore Site 2. However, this does not rule out the possibility of there being buried finds. This diving campaign was impacted by rough weather conditions which are an ongoing issue on these sites which are exposed to the prevailing weather conditions.

2.1.8. In 2019 the NAS and MAT 'Community Archaeology Project', funded by Historic England, delivered a range of training activities and public events based around the sites. This worked with the licensees to help develop and train a team of local wreck custodians in addition to gathering detailed site photogrammetry for the production of an online diver trail and updated site plans (Figures 2 and 3). Diving in September 2019 was impacted by bad weather, however, a photogrammetric survey of the Inshore Site 1 was completed.

2.1.9. Rescheduled diving in 2020 completed the photogrammetry of the Offshore Site 2. This survey revealed that a cannon on the site had been moved from its previous position.

2.1.10. Assigned an archaeological ID of 2104 during the Wessex Archaeology survey, this gun is the largest observed on the Offshore Site 2 and was shown, through the results of the latest photogrammetric survey and comparison with the 2015 coverage, to have been cleanly displaced 10m to the north, now lying in the position of what was the northernmost gun, ID 2102.

2.1.11. Cannon 2102 also appears to have been displaced, rotated clockwise approximately 45 degrees and displaced approximately 0.5 m to the east. Though the latter has not travelled far, it has somehow been extracted from its previous state of approximately 50% burial.

2.1.12. Other than the well-defined, infilled hollow and the current location of the guns, there is no clear evidence of how the movement of ID 2104 and 2012 has occurred. At this stage it is not known whether this is due to fishing activity or diver interference.

2.1.13. Several instances of damage to concretion have been noted on the Offshore Site 2 where clear interference has occurred. Loss of concretion from the muzzle of gun ID 2103 has been noted by WA in 2015 and in the 2020 survey. Concretion has been recently lost from the trunnion of cannon ID 2105, evidenced by exposed iron, characteristically orange under the lights used during diver-based survey.

2.1.14. Another important contribution of the 2020 fieldwork was the identification of a new cannon on the Offshore Site 2, 5m north of the main group, ID 2107. Measuring 2.3 m in length, this gun has not been recorded during previous surveys, which may be due to poor visibility or changes to sediment levels revealing previously buried material. Though Wessex Archaeology may have seen this in 2015, it does not appear on their site plan and was not included in the designation order. It is likely that overall levels of site sediment have been reduced since 2015. This cannon lies within the currently designated area.

2.1.15. The latest find brings the total number of cannons identified at the Offshore Site 2 to eight.

2.1.16. While little new information has been gathered relating to the Inshore Site 1, the 2019 survey represents an important monitoring record of the recent state of this assemblage. Overall sediment levels have increased significantly since 2015, meaning only three of the five complete guns could be seen completely or partially exposed. The distribution of gun fragments and large concretions remains unchanged since 2015.

2.1.17. Site interference remains an issue however, evidenced by a lost leisure boat anchor and line within the main concretion gulley, as well as what is likely to be modern debris, possibly part of a trawler otterboard, or other fishing related material. Direct trawling of the site is unlikely due to its close proximity to the beach, however, there have been local reports of trawlers close to the sites and impacts from these activities remain a possibility.

2.1.18. Investigation of these wrecks is still at an early stage with many archaeological avenues still open for examination. While detailed site plans have been created of the Inner Site 1 and Outer Site 2 using photogrammetry supported by measured survey and diver descriptions, these plans will only be accurate for a short time due to the active seabed in the area. There is also a strong chance that new finds will be revealed on the seabed and recorded ones may disappear due to local environmental conditions. The presence of wooden hull structure at 'Site 3' although not part of the designated areas, should not be overlooked as potentially related to these sites.

2.1.19. The known information on the Chesil Beach Wrecks Sites may be presented as a summary Ship Biography which draws together the main attributes of the site/s and provides a statement of their archaeological interest.

**Build:** Inshore Site 1 - Unknown, wooden trading vessel carrying cannon (at least three of seven being English) dating to between 1675 – 1725.

Offshore Site 2 – Unknown, wooden trading vessel, carrying English cannon dating to between 1650-1700.

**Use:** Inshore Site 1 - Unknown, likely a merchant ship which had a cargo of unmatched cannon, possibly sailing from England to a colony.

Offshore Site 2 – Unknown, likely a merchant ship with an armament of large cannon.

**Loss:** The specifics of loss are unknown. There are a number of accounts of loss from early newspaper reports that include some of the candidate losses. Chesil Beach is a well-known site of shipwrecks over centuries and there are significant numbers of ships that have been lost here. The situation of both ships on the windward side of Chesil Bank suggested they were driven onshore in storm conditions. The situation of the Inshore Site 1 in shallower water means it is more likely to have been subject to post-wrecking salvage as it would have been more easily accessible.

**Survival:** The extent of potential surviving structure below the seabed on both sites is currently unknown as there has been no intrusive investigation.

Inshore Site 1 – Although in 11m of water in what is a highly dynamic area at the toe of Chesil Beach the presence of wooden fragments, a potential cluster of shot from a locker, scattered shot and concretions along with the cannon suggest there are likely to be further remains preserved below seabed level.

Offshore Site 2 – Lying in 15m of water and further off Chesil Beach than the Inshore Site, this is still a high energy environment. The cannon are the only remains visible above the seabed; their presence together suggests a single wrecking event and it is likely there are further remains buried below the seabed.

**Investigation:** The sites were recorded in 2010 by local divers and reported to Historic England, subsequent investigations have been undertaken with the local divers. An

undesigned site assessment by Wessex Archaeology delivered direct survey of cannons and photogrammetry of the sites in 2015. Further site recording by the Nautical Archaeology Society and Maritime Archaeology Trust extended searches for exposed material (2018) and included a more detailed photogrammetry survey of the sites (2019 and 2020).

## **2.2. Description of Surviving Features**

### **2.3. Inshore Site 1**

2.3.1. The Inshore Site 1 consists of a fairly diverse assemblage of nine heavily concreted cast-iron muzzle loading cannons, a scatter of cannon fragments, large quantities of iron shot, concretions and a number of small fragments of worn worked wood covering an area approximately 12m by 12m. Some of the cannon are mostly or completely buried and it is possible there is other buried wreck material, particularly inshore of the remains. These finds are located on a gravel and cobble seabed in a high energy environment just offshore of the toe of the beach slope at a depth of approximately 11m. The beach and seabed are subject to modification by very large storm driven waves.

2.3.2. During the investigations by Wessex Archaeology seven cannon had been identified, with one lying off from the main site. Four of the cannon were fully exposed which enabled their full dimensions to be recorded. At least three of the seven guns were tentatively identified as English 24-32 pounders, cast between the third quarter of the 17th century and the first quarter of the 18th century (1675 – 1725) (Wessex Archaeology 2016:8). Only one of the four guns recorded was undamaged, one had modern rope attached to both trunnions and may indicate attempts to move it. As well as the complete guns there are at least five barrel fragments in the centre of the site. Subsequent to the WA survey the Shipwreck Project identified two further guns lying inshore of the site – bringing the total identified to nine.

2.3.3. Concreted cast iron shot are scattered around the site, one example measured was 170 mm in diameter which would be used for a 32 pounder cannon. There are also larger concretions on site which appear to be mounds or 'lumps' of concreted shot, one such 'lump' measures 4m long x 1.5m wide. This may indicate the position of a shot locker on the ship (Figure 4). These mounds may also surround additional sections of now broken gun barrels.

2.3.4. Wooden fragments are reported on site, usually lodged under concretions, many are thought to be modern debris, although two objects could represent rigging fittings. Apart from the finds described above, there is evidence of likely buried wreck material, but no evidence of ship structure has yet been found.

2.3.5. Wessex Archaeology concluded that the most likely explanation is that the guns are part of an outbound cargo that was being carried on a merchant ship. The presence of broken cannon on site may be related to the potential use of dynamite on the wreck in the past.

### **2.4. Offshore Site 2**

2.4.1. The Offshore Site 2 lies approximately 220m to the south of the Inshore Site 1 and further offshore; this area is still a high energy environment. The site consists of eight very heavily concreted cast-iron cannon on a slightly sloping, north-east to south-west, sandy gravel seabed covering an area 30m by 12m and at a depth of 15m, increased from seven guns detailed in the NHLE list entry following the 2020 survey.

2.4.2. One of the guns has been tentatively identified through the thick concretion as a six pounder and though the other cannon have their distinguishing features obscured by concretion, they appear to be a different design to the cannon on the Inshore Site 1. One gun appears to be loaded with shot

in the muzzle, but the concretion on the other guns makes it impossible to determine if the others are loaded.

2.4.3. While the guns are not firmly dated, enough has been discovered to predict that they are probably English and cast in the second half of the 17th century (1650 – 1700). Otherwise, no archaeological material has been found and the wreck is currently unidentified (Wessex Archaeology 2016: 12).

2.4.4. WA discussed the potential for the cannon to have been jettisoned during a wrecking event, but due to their size and number it is thought more likely they represent the site of a wrecked vessel. The distribution of the guns is within a relatively small area which would have required the vessel to be at anchor for some time to facilitate their jettison with 20m of one another. However, until further material associated with vessel structure is identified in situ, this possibility cannot be discounted.

## **2.5. Additional Area of Wooden Hull**

2.5.1. Although not within the Designated Protected Areas, there is a piece of wooden ship hull (Site 3 within the Wessex Archaeology undesignated site assessment) lying 220m to the south-east of the Offshore Site 2, and in a similar depth of water. It is a small section of carvel planked wooden ship hull which may or may not be associated with either sites (Wessex Archaeology 2016: 12). The position for this site is: 50, 36.559935N/ 02, 31.938911W (WGS 84).

2.5.2. WA inspection was hampered by poor visibility, however, planking with wooden treenail fastenings and traces of fittings was observed, with at least three strakes being present. The structure was recorded as approximately 1.5m x 1.5m in size and likely of oak. The Shipwreck Project, at initial discovery, dug a small hole adjacent to the structure which revealed a frame below and another layer of planking.

2.5.3. The possibility of this wooden hull being associated with either of the Inshore Site 1 or the Offshore Site 2 should not be discounted.

## **2.6. Gaps in Existing Knowledge**

2.6.1. The existing knowledge of the Chesil Beach sites is limited. Chesil Beach has been a well-known 'ship trap' for many years, its size and position mean it is frequently the first area of land ships caught in prevailing south-westerly storms encounter when off this stretch of coast. The dating of the cannon from both sites has resulted in the tentative date ranges for both wrecks.

2.6.2. The current interpretation of the Inshore Site 1 is that the cannon are part of a cargo as they are larger than would be expected for merchant vessels or privateers and there is no record of a large naval vessel of this period being wrecked in the area. The mix of cannon lengths further points towards cargo as they would be a very uneven set for onboard armament. Around the time of the wreck (1675 – 1725) consignments of large guns were being sent out to English colonies, with Barbados alone receiving more than 400 cannon between 1660 and 1815. As the guns are thought to be English, it could suggest a vessel sailing from an English port.

2.6.3. There remain significant gaps in knowledge concerning the design and size of the ship, with it only being possible to infer a relatively large size due to the quantity and weight of the cannons. The date of loss can only be given a broad range based on the likely date of the cannon, with a period from around 1650 to 1780 being feasible. More specific dating evidence is required to narrow down the potential date of loss.

2.6.4. The current interpretation of the Offshore Site 2 is that it is almost certainly the wreck, or part of a wreck, of a wooden sailing ship of the second half of the 17th Century (1650 – 1700). This is

supported by the size and type of the cannons. It is thought the guns were being carried as armament, rather than cargo, as one gun appeared to be loaded (and the others could be).

2.6.5. As with the Inshore Site 1, there are significant gaps in knowledge in terms of the design and size of the ship, again it is possible to say it would have been a ship of significant size due to the size and weight of the guns. The potential date of loss is again broad and based on the cannon dating, this site is likely to be slightly earlier in date than the Inshore Site 1, potentially between 1650 and 1740.

2.6.6. The physical extent of the sites and possible connections between the two protected areas has not been established and further searches in the area around the groups of cannon may provide more information. To gain more specific dating information, intrusive investigation would be required.

2.6.7. It is not clear whether there is any direct association between the Inshore Site 1 and Offshore Site 2. The difference between each collection of cannons suggests they represent two separate wrecks. However, until firm dating evidence can be retrieved from both sites it is impossible to rule out them being related to the same shipwreck.

2.6.8. There are several anecdotal reports of material having been recovered from the vicinity in the 1970s including shot, a brass barrel spigot and an C18 iron cannon (now on display in Portland). Trial excavations in the 1970s also led to the recovery of a number of items including a huge plug of tobacco preserved beneath the cannon, and a number of Dutch silver coins (Hinchcliffe 1999: 96 as quoted in Wessex Archaeology 2016: 7). Records held by the Receiver of Wreck indicate recoveries of three cannon balls in a canvas bag, rivets, a branding iron and a canvas needle. However, these artefacts cannot yet be directly associated with the Chesil cannon assemblages.

2.6.9. The NHLE list entry states that the “NRHE records the documented losses of 25 ships at Chesil between 1600 -1780, of which seven date specifically to 1650-1733”. These potential candidates (see Table 2 below) provide an opportunity to target further research and it is noted that records of exported ordnance might assist with the identification of the Inshore Site 1. Two specific candidates that have been put forward for the sites are:

2.6.10. *De Hoop or Hope*: a 1749 wreck of a Dutch West Indiaman which stranded at Chesil Cove en route from Jamaica and/or America to Amsterdam, laden with gold and silver coin, linen, woollen goods and tobacco. Constructed of wood, it was a sailing vessel and was armed. *De Hoop* is a documented wreck which fits some of the circumstances and date although the large size of the guns may cast some doubt on this. Whether it is likely that a Dutch West Indiaman would be carrying English guns is unclear but guns can appear outside of their national context, for example the protected warship *London* was carrying Dutch guns. *De Hoop* was wrecked and ‘became embayed in the Deadman's’ which is Deadman's Bay, an inlet behind Chesil Bank.

2.6.11. *Squirrel*: a British candidate, which is the wreck of a cargo vessel which stranded on Chesil Beach in 1750. It was a wooden sailing vessel bound from Maryland for London, laden with 513 hogsheads of tobacco.

2.6.12. Both *Squirrel* and *De Hoop* were homeward-bound which may strengthen their case as potential candidates, since the prevailing south-west wind in the Channel may have increased the likelihood of vessels from the westward stranding on Chesil Beach. Both of these ships, along with two others – the *Zenobie* and a ‘logwood ship’ from Honduras - are specifically recorded on the Isaac Taylor map of Dorset which, due to its date of 1765, would have been relatively soon after some of the wrecks occurred and might have benefited from local knowledge (Charmouth Local History Society).

2.6.13. However, the accuracy of information about the wrecks is unclear as it says 'The *Hop*' is a 'Spanish Ship from the Spanish Main', and that 30000 (? Coins?) were 'saved' from the ship; it is not surprising that the memory of such a 'treasure' ship for locals would have lived on, even if the nationality of the ship had become confused.

2.6.14. The following list of potential candidate sites (Table 2) provides a short list for further research:

Table 2 - List of candidate vessels potentially associated with Chesil Cannon Sites.

Name	Date	Description
<i>Golden Grape</i>	1641	Wreck of a cargo vessel which stranded in West Bay near Wyke Regis en route from Cadiz for Dover with a cargo of 2,000 barrels of raisins, 400 jars of oil, 12 butts of sherry and sack, 240 pieces of silk, silver plate, coin, oranges, lemons, olives, wool, shot and cannon. Wreck struck near the southern end of the East Fleet, close to New Works. Ship didn't entirely break up for four days and was much salvaged by locals.
Unknown	1668	The wreck wooden, sailing, Dutch cargo vessel which was reported as stranded on the 22nd of February 1668 on Chesil Beach. The crew and cargo were saved.
Unknown	1668	The wreck of a French cargo vessel, constructed of wood and registered in Dieppe. Stranded on Chesil Beach on the 2nd of October 1668. It was bound for La Rochelle with a cargo of salt. The crew were saved.
<i>John</i>	1669	The wreck of a wooden, sailing English cargo vessel, which was reported as stranded on the 10th of February 1669 upon Chesil Beach as a result of poor visibility and weather conditions. She was carrying a cargo of linen from Morlaix.
Unknown	1676	Wreck of English hoy which stranded on Chesil Beach. Constructed of wood, it was a sailing vessel. The ships 'furniture' valued at £30. The master was Thomas Tollard.
<i>Angel Guardian</i>	1681	Wreck of a wooden, sailing, cargo vessel which stranded near Weymouth carrying a cargo of oranges on its passage from Lisbon.
<i>Peter</i>	1685	Wreck of a French cargo vessel which stranded at Chesil Cove, carrying a cargo of wine. Constructed of wood and registered in St Georges, it was a sailing vessel.
<i>Golden Fleece</i>	1706	1706 wreck of English craft which stranded on Chesil Beach. Constructed of wood, it was a sailing vessel.
<i>James And Magdalen</i>	1734	British Cargo Vessel, 1734. Reported as sailing with grocery wares from Bristol for London when ran ashore on Portland Beach. The ship and cargo were lost but the men were saved.
<i>Prince Of Asturias</i>	1739	Wreck of cargo vessel which stranded approximately a mile west of Portland, on Chesil Beach, being "so much damaged that it is impossible to get her off". Reported that the cargo and materials mostly saved, but hull is too damaged to get it off.
<i>Squirrel</i>	1748	Wreck of wooden, sailing, British cargo vessel which stranded on Chesil Beach. Laden with tobacco. This is a repeat of the entry for the ship in 1750.
<i>De Hoop</i>	1749	Wreck of Dutch West Indiaman which stranded at Chesil Cove en route from Jamaica and/or America to Amsterdam, laden with gold and silver coin, linen and woollen goods, and tobacco. Constructed of wood, it was a sailing vessel and was armed. Reported to be a 500 ton ship with a crew of 90, captain was Cornelus. One source suggests it had 30 guns onboard. One source suggests the mast went ashore on the beach helping the crew escape which would indicate a close-in position. Reported to have struck with great force and broke up very quickly.
Unknown	1749	Wreck of Dutch cargo vessel which stranded on Chesil Beach. Reported as plundered and deliberately broken up by locals. Sailing vessel. There are reports of three Dutch wrecks on Chesil in a similar period, although they may represent the same wreck.
<i>La Carp</i>	1750	Wreck of French cargo vessel which stranded on Chesil Beach on route from Le Harve to Brest and/or Rochefort. Laden with timber, cod, herring, wine, silks and linen, it was armed with 20 guns. Reported to be a 300 ton ship, or above. The captain, Burel and 35 crew were saved, 14 were lost.

<i>Squirrel</i>	1750	English cargo vessel, 1750. The Squirrel, Toy, of North Yarmouth, from Maryland for London, with 513 hogsheads of tobacco, was wrecked to the westward of Weymouth, and the master, 2 mates, 8 men and a woman passenger drowned.
Unknown	1750	Wreck of a Dutch cargo vessel which stranded between Lyme and Portland with tobacco. Built of wood, it was a sailing vessel.
<i>Johanna Theresa</i>	1753	Dutch craft, 1753. Stranded while voyaging from Hamburg to Cadiz, the captain (Strohin) and five crew were lost.
<i>Biscaye</i>	1754	Spanish cargo vessel, 1754. Master was Joseph de Alerde.
<i>Charming Molly</i>	1754	British craft, 1754. Lost on Chesil Beach 3 miles west of Portland. A passenger jumped off but was drowned, as was one other member of the crew.
<i>Griffin</i>	1757	British craft, 1757, stranded near Abbotsbury. Master was Chalmers, the mate, 6 men and 2 women drowned.
Unknown	1758	Cargo vessel, 1758. This is believed to be the 'logwood' ship shown on the Isaac Taylor map of Dorset.
<i>Fanny</i>	1760	1760 wreck of English brigantine which stranded at Chesil Cove outward-bound from London for Senegal with flour and other cargo, it was involved in the slave trade. Only the captain (McLane) and four crew were saved. This 80 ton ship with six guns was registered in Birkenhead. It was built in the 'British Plantations'.
<i>Zenobie</i>	1762	Wreck of a French frigate which stranded near Wyke House on January 13th on its passage from Le Havre. A warship and likely privateer, differing reports say the ship carried 22 guns and another 'between 30 and 40 guns', driven on shore near Portland, 70 of the crew are saved, captain Defages is drowned.
Unknown	1774	Dutch craft, 1774. 7 of the 11 crew were lost.
<i>Blandford</i>	1780	1780 wreck of British sloop of 50 tons which stranded at West Fleet, Chesil Beach, while bound from Truro (or Falmouth) for London with copper and tin. Reported to have 'gone to pieces, but part of the cargo will be saved'.

## 2.7. Ownership, Management and Current Use

2.7.1. As the Chesil Beach Wreck Sites have not been identified, the owner cannot currently be determined. The seabed on which the wrecks sites lie is owned by The Crown Estate. Public access to the sites is achieved by licence under the PWA. This licensing is currently administered by Historic England. As physical access to the sites is restricted to licenced divers, the recovery of artefactual material can in theory be managed and controlled, although there remains some potential evidence of interference with the sites occurring. Diving in 2020 identified that a cannon on the Offshore Site 2 site had moved from its previously recorded position, as well as a newly identified cannon. At present it is unclear if the displacement of the gun is due to impact from trawling or an attempted diver recovery of the cannon.

2.7.2. The sites were recorded by the Shipwreck Project in 2010 and subsequently reported to Historic England and subject to an undesignated site assessment by Wessex Archaeology in 2015, they were designated in 2017. The sites benefit from local involvement with two licences currently issued – one for survey and one for visiting the sites. Shipwreck Project members continue to be involved in the sites and have worked with the Nautical Archaeology Society in 2018 and the NAS and Maritime Archaeology Trust during the most recent stage of work.

2.7.3. Work by the NAS and MAT funded by Historic England has sought to help develop a group of local custodians, to train them and help develop the skills for survey and monitoring in the future. This stage of work has also developed a virtual dive trail for the sites to enable public access.

## 2.8. Statutory and Other Designations

2.8.1. The designation order under the Protection of Wrecks Act (1973) for the Chesil Beach Wrecks, dated 18<sup>th</sup> July 2017, was laid before Parliament on the 19th July 2017 and came into effect on the



18th August 2017. In the Order's explanatory notes it states that an area within a distance of 30 metres of each position - Latitude 50°36.758489 N, Longitude 02°32.070084 W and Latitude 50°36.651607 N, Longitude 02°32.059267 W - is protected (Figure 1) (Statutory Instrument 2017/773). NHLE list entry states that the Inshore Site 1 is believed to be the remains of a merchant ship, with cannon cast between 1650 and 1725, and that the Offshore Site 2 also comprises the remains of a wooden sailing ship with cast iron cannon from the second half of the 17<sup>th</sup> Century.

2.8.2. Designation under the Protection of Wrecks Act (1973) recognises the sites as historic wrecks that can contribute to the understanding of the UK's maritime past on account of their historical, archaeological or artistic importance. Designation prevents uncontrolled disturbance of the sites and also means that Historic England can develop research, education and access initiatives to raise awareness and encourage involvement with the wrecks (English Heritage 2010).

2.8.3. Chesil and The Fleet are covered by a wide number of nature designations including:

- Marine Conservation Zone (MCZ) Chesil Beach and Stennis Ledges – one of the first MCZs to be designated in 2013 it runs the length of Chesil Beach from Abbotsbury to Weston on the Isle of Portland, it extends seawards to include the reefs of Stennis Ledges. The protected features within the MCZ include high energy infralittoral rock, high energy intertidal rock, subtidal coarse sediment, mixed sediments and sand, native oysters and pink sea-fans. The wreck sites lie within this MCZ.
- Special Protection Area (SPA) - terrestrial area adjacent to the sites designated due to breeding populations of Little Terns and visiting population of Wigeon.
- SSSI Chesil and the Fleet covers the terrestrial area adjacent to the sites.
- Ramsar Chesil Beach and The Fleet – designated terrestrial area adjacent to the sites due to breeding bass, coastal lagoon, dark-bellied brent geese overwintering and shingle habitat.
- SAC (Special Area of Conservation) Chesil and The Fleet – this designation includes areas of the seabed. It has been designated due to features including coastal lagoons, vegetation drift lines, perennial vegetation of stony banks, salt meadow and scrub.

2.8.4. An interactive map of the protected zones around the wreck can be found at: <http://magic.defra.gov.uk/MagicMap.aspx>

2.8.5. Archaeological interventions that impact the seabed may require a licence issued by the Marine Management Organisation under the Marine and Coastal Access Act 2009 and a licence from The Crown Estate. Due to the position of the sites within an MCZ work conducted may need an assessment of whether the impacts will have a likely significant effect on the MCZs designated features, this may be a requirement of an MMO license.

### **3. Assessment of Significance**

#### **3.1. Basis for Assessment of Significance**

3.1.1. Significance has been defined as the sum of the cultural and natural heritage values of a place (English Heritage 2008a). Cultural heritage value has many aspects, including:

- The potential of a place to yield primary information about past human activity (evidential value, which includes archaeological value);
- The ways in which it can provide direct links to past people, events and aspects of life (historical value);
- The ways in which people respond to a place through sensory and intellectual experience of it (aesthetic value, which includes architectural value); and

- The meanings of a place for the people who identify with it, and communities for whom it is part of their collective memory (communal value).
- The wider social and economic benefits that a site can generate as a learning or recreational resource, a generator of tourism or inward economic investment (instrumental value) (English Heritage 2008a).

3.1.2. The historic environment is a cultural and natural heritage resource shared by communities characterised not just by geographical location, but also by common interests and values. As such, emphasis may be placed upon important consequential benefits or potential, for example as an educational, recreational, or economic resource, which the historic environment provides.

3.1.3. The seamless cultural and natural strands of the historic environment are a vital part of everyone's heritage, held in stewardship for the benefit of future generations.

3.1.4. The basis for assessing significance therefore enables consideration of the varying degrees of significance of different elements of the site. By identifying those elements which are vital to its significance and so must not be lost or compromised, we are able to identify elements which are of lesser value, and elements which have little value or detract from the significance of the site.

## **3.2. Statement of Significance**

3.2.1. The significance of the Chesil Beach Wrecks cannot be fully understood as the wrecks are yet to be conclusively identified.

3.2.2. Both sites are part of a large group of vessels recorded as having been lost off Chesil Beach. In terms of period, they form part of a small group of 17<sup>th</sup> and early 18<sup>th</sup> century wrecks identified off England.

3.2.3. Current interpretation of the Inshore Site 1 is that it represents a wooden sailing cargo ship that was transporting material that included English cannons which date to between 1675 – 1725. It may have been sailing from an English port, and could have been lost within a period from around 1650 to 1780.

3.2.4. Current interpretation of the Offshore Site 2 is that it is the wreck, or part of a wreck, of a wooden sailing ship, dated by its collection of cannon which are believed to be armament, to the second half of the 17<sup>th</sup> Century (1650 – 1700). The potential date range of loss is again broad and could be between 1650 and 1740, and possibly later.

3.2.5. Iron guns from this period are relatively rare and have the potential to add to knowledge of gun founding and design, as well as guns exported for trade and for arming fortifications.

3.2.6. Two potential candidates for these sites have been tentatively put forward – the Dutch West Indiaman *De Hoop* lost in 1749 and the English cargo vessel *Squirrel* lost in 1750 with a cargo of tobacco. There are a number of other potential candidates for these losses that have been identified in historical records.

3.2.7. Although the historical record of ship losses from the 17<sup>th</sup> and 18<sup>th</sup> Centuries demonstrates many losses, the location of wreck remains from these periods is still relatively rare. Many sites identified from these periods are Naval wrecks, making the likely identity of both the Chesil cannon sites as cargo vessels particularly significant. It is likely that both sites preserve evidence of important aspects of English trade in a period when networks were being established and the process of colonisation was rapidly expanding.

3.2.8. In terms of wider group value and protected historic wreck sites the near-by West Bay wreck site, which is also an unidentified cannon site, can be seen to have geographical as well as potential period-based group value. There is further work required to develop potential research themes which encompass English ships of a similar period such as the *London* and several of the ships on the Goodwin Sands, all of which are considered to have outstanding archaeological interest. There are also other designated wrecks of different nationalities which are likely to date to a similar period, that alongside the Chesil Beach Wreck Sites, can develop understanding of growing international trade.

3.2.9. The Chesil Beach Wreck Sites were reported by local divers and the local community retains a keen interest in them and may be viewed as unofficial ‘custodians’. The Chesil Beach Wreck Sites may be seen to provide a recreational (and therefore economic) resource by virtue of diving tourism.

3.2.10. Whereas historical and communal values contribute to the assessment of significance of the Chesil Beach Wreck Sites, these values cannot stand alone. Without the continued enhancement of certain values, interest in the Chesil Beach Wreck Sites would be diminished. As such, extant material remains on the seabed are vital to the significance of the site and must therefore not be lost or compromised.

3.2.11. The following table seeks to summarise these values of the Chesil Beach Wreck Sites as a whole, by noting how those values relate to the surviving fabric and their constituent parts:

Evidential	Relating to the potential of the Chesil Beach Wreck Sites to yield primary information about past human activity. The cannon on site are the key evidence so far located, however, very limited archaeological work has yet been undertaken. Likely buried remains at the Inshore Site 1 and Offshore Site 2 indicate the survival of more material below the seabed. If confirmed as late 17 <sup>th</sup> or early 18 <sup>th</sup> century cargo ships, they have much potential to hold evidence on the movement of guns to colonies and the development of colonial trading links.
Historical	Relating to the ways in which the Chesil Beach Wreck Sites can provide direct links to past people, events and aspects of life. At present this is very limited as the wrecks have not been identified, the date of their wrecking is unknown, but probably between 1650 – 1780. There is currently no documentary evidence that can be firmly related to the sites.
Aesthetic	Relating to the ways in which people respond to the site through sensory and intellectual experience of it. With no recovered material from the site and no physical display of information the primary way most people with experience the sites will be through the virtual diver trail. Physical access to the sites by divers is limited to licenced visitors.
Communal	Relating to the meanings of the Chesil Beach Wreck Sites for the people who identify with them and whose collective memory they hold. The Shipwreck Project Team, Wessex Archaeology divers, Site Licensees, NAS members and trainees and staff of NAS and MAT are the only people who have officially visited the site remains.
Instrumental	Economic, educational, recreational and other benefits which exist as a consequence of the cultural or natural heritage values of the Chesil Beach Wreck Sites. These include the sites value as dive sites of historic interest.

### 3.3. Gaps in Understanding of Significance

3.3.1. The most notable gaps in understanding the significance of the Chesil Beach Wreck Sites are the lack of a positive identification, including:

- Definitively resolving whether both sites represent one or two ships;
- The name of the ships;
- Their country of origin and date (contributing to its historical value);
- Establishment of the full extent of the site and the identification of any buried structural remains on the seabed (contributing to its evidential value).

## **4. Issues and Vulnerability**

### **4.1. Introduction**

4.1.1. This section summarises the main conservation and management issues that specifically affect, or may affect, the significance of the protected wrecks and their component parts and elements.

4.1.2. Vulnerability (and therefore risk) may be assessed against environmental factors such as natural processes and human impact on the sites, including the setting (English Heritage 2008b). Current assessment may indicate that such marine sites are at medium or high risk, unless they are completely buried below bed level during successive tidal cycles (Camidge & Johns 2016).

4.1.3. It is accepted that all wreck sites are vulnerable because of the nature of their environment, though sites will be considered to be at risk when there is a threat of damage, decay or loss of the monument. However, damage, deterioration or loss of the monument through natural or other impacts will not necessarily be considered to put the monument at risk if there is a programme of positive mitigation through effective management. Practical measures that affect site stability, preservation in situ and increased visitor access will be considered (English Heritage 2013).

### **4.2. The Physical Condition of the Sites and their Settings**

4.2.1. The Chesil Beach Wreck Sites are located close to the shore near the prominent Beach feature, however, they are within a fully marine setting. The Inshore Site 1 lies at a depth of 11 metres, the Offshore Site 2 lies at a depth of 15 metres. They are on and within a sand and cobble seabed.

4.2.2. The sites are relatively easy to access by boat from local launch points. Being at a shallow depth, particularly the Inshore Site 1, means they are subject to sea swell as well as tidal currents. The area can be highly dynamic with storm driven waves remodelling the beach and nearby seabed.

4.2.3. The visibility on the sites varies depending on the weather and tidal conditions and, like many inshore dive sites, can vary considerably from almost zero to up to four metres during calm periods.

4.2.4. Geophysical survey identified the sites in 2010, with ground truthing by divers, subsequent diving investigations in 2015 and 2018-20 have so far shown the seabed sediments around the wrecks to be reasonably stable despite their position in such a dynamic area. This is a relatively short time to have data from the sites and further monitoring is required to confirm the extent to which the natural environment changes are a threat. Even slight changes in sediment levels could expose new features.

4.2.5. The dynamic nature of Chesil Beach, along with its range of protections for nature designations means there is likely to be a relatively wide range of data available on the long-term physical changes in the area. A detailed assessment of this data in relation to the sites is yet to be undertaken.

4.2.6. The extent to which there are preserved wreck and artefact remains below the seabed level on either the Inshore Site 1 or the Offshore Site 2 is yet to be determined. However, the presence of an area of wooden ship hull exposed to the south east of the Offshore Site 2 between 2010- 2015 (and may still be exposed), demonstrates it is possible for ship structure to be preserved in this area.

4.2.7. The geographical spread of material is also currently unknown and there is further work to be done to determine the potential size of the area over which cultural material may be present either above or below the seabed.

4.2.8. Although the sites are most vulnerable to the natural environment there are also threats from interference by divers. The Shipwreck Project reported that their investigation of the sites was observed and they subsequently found that some concretion had been removed from two of the guns (Wessex Archaeology 2016:iv). There are also potential threats from small scale commercial fishing activity with trawling rumoured to occur occasionally (WA 2016: 16). The movement of one of the cannons on the Offshore Site 2 between 2019 and 2020, could have been caused by a trawl dragging the gun across the seabed and could bear out the risk of such interference.

### **4.3. Conservation and Presentation**

4.3.1. The sites were first designated under the Protection of Wrecks Act on the 18<sup>th</sup> July 2017 (Statutory Instrument no: 2017/773), coming into force on the 18th August 2017. The protected areas are 30m radius from points: Latitude 50°36.758489 N, Longitude 02°32.070084 W and Latitude 50°36.651607 N, Longitude 02°32.059267 W.

4.3.2. Photogrammetry survey has enabled the development of detailed 3D modelling of both sites, albeit in a relatively small area for each site. These models form high resolution records developed in one or two days and serve as ‘snapshots’ of site composition and distribution that can be compared with previous survey and larger area-based datasets such as side scan sonar and bathymetry.

4.3.3. In addition, the visual nature of this type of survey provides a high impact representation of the material, the environment and its significance to various audiences, including divers, non-diving general public, archaeologists and curatorial professionals.

4.3.4. Interpretive material has been made available online through a virtual diver trail which is accessible through the websites of Historic England, the NAS and MAT. The relatively recent nature of the discovery and designation of these sites means their archive is largely ‘born digital’. Digital data is held by Historic England/ Wessex Archaeology, NAS and MAT. The online interactive draws together the narrative, previous and current work, and a guided ‘virtual dive trail’ for each of the cannon locations <https://chesil.maritimearchaeologytrust.org>.

4.3.5. As part of the project undertaken in 2019 a set of exhibition posters and a short video about the sites were produced for a public display hosted in the mobile Maritime Archaeology Discovery Bus, these resources or their content have been included within the virtual diver trail.

4.3.6. There is currently no physical interpretive material associated with the wrecks. The feasibility of the installation of information boards near the sites has not been considered in detail, there are likely to be issues with permissions due to the Nature Designations, however, local boards may be possible. There is also the Chesil Beach Visitor Centre close by which is another potential option for the installation of interpretive material on the sites. There are museums in Weymouth and on Portland which, due to the character of the area, have a maritime focus. The Dorset County Museum is in Dorchester. There is also an English Heritage property close by – Portland Castle – which could have a role in the presentation of the sites. Other potential venues for interpretation are Portland Marina and West Bay Heritage Centre. Should further investigation of the sites be undertaken one of the museums or properties may be willing to hold the archive and site interpretive material.

### **4.4. Visitor and Other Occupancy Requirements**

4.4.1. The sites are currently restricted to divers accompanied by one of the site licensees. There are currently no plans to develop a physical dive trail on the sites. Any persons wishing to visit the sites

will be directed to the Licensees and will be encouraged to participate in any ongoing licensed survey initiatives.

4.4.2. The virtual diver trail allows the site to be accessed by the public, this includes as much information as is currently available on the sites. It is recognised that further survey, potentially with excavation on the sites, is likely to recover data to increase the interpretation of the sites significantly. The virtual diver trial will be revisited in the future as and when new evidence comes to light.

#### **4.5. The Existence (or Lack) of Appropriate Uses**

4.5.1. Regular, consistent and reliable information relating to the condition of the Chesil Beach Wreck Sites will be necessary to monitor the existence (or lack) of appropriate uses of the site. It is currently unconfirmed whether there is unlicensed diving activity on the site. The movement of a cannon on the Offshore Site 2 may indicate interference from either diving or fishing.

4.5.2. The sites were designated relatively recently (2017) so the nature of the protection may not yet be well established locally. It is hoped that public dissemination work undertaken in 2019 which included a public talk and two public exhibitions will have raised understanding of the protection.

4.5.3. Enforcement of the Protection of Wrecks Act 1973 is the responsibility of the appropriate County Constabulary as it is a criminal offence to any of the following in a designated area without a licence granted by the appropriate Secretary of State:

- Tamper with, damage or remove any part of a vessel lying wrecked on or in the seabed or any object formerly contained in such a vessel.
- Carry out diving or salvage operations directed to the exploration of any wreck or to removing objects from it or from the seabed, or uses equipment constructed or adapted for any purpose of diving or salvage operations. This is likely to include deployment of remotely operated vehicles.
- Deposit anything including anchors and fishing gear which, if it were to fall on the site, would obliterate, obstruct access to, or damage any part of the site.

4.5.4. It is also an offence to cause or permit any of the above activities to be carried out by others, without a license, in a restricted area.

#### **4.6. Resources, including Financial Constraints and Availability of Skills**

4.6.1. No archaeological material is known to have been recovered from either of the Chesil Beach Wreck Sites. If work was to occur then a suitable museum would need to be willing to accession artefacts and the associated archive. It is possible that English Heritage could house and present the archive from the site at their Portland Castle property. Any excavation work would be undertaken in line with a Project Design agreed with Historic England.

4.6.2. Historic England is able to provide support for projects whether being undertaken by a professional team working under the Diving at Work Regulations 1997, or projects being undertaken on an avocational basis. These investigations must have advice and support from individuals or organisations with appropriate archaeological experience.

4.6.3. Without intrusive work it is unlikely that the full significance of the sites will be understood as their full extent, character and identity is unconfirmed. Recovery of material is likely to increase the evidential value of the site along with interaction with the archaeological material which relates to their aesthetic and historical value.

4.6.4. The cost of dealing with recovery, storage and conservation of large items from a marine context can be high and this may exceed the professional and funding capacity of Historic England. In which case, external funding and professional skills would need to be obtained.

4.6.5. Should excavation take place there may be opportunities to recover smaller robust artefacts such as ceramic finds which can be stored and conserved easily and relatively cheaply, these may assist in the identification of the wrecks. Recovery of some of the smaller concretions on the site may reveal artefacts or information about the materials and processes forming the concretions.

#### **4.7. Lack of Information or Understanding about Aspects of the Sites**

4.7.1. The lack of understanding about the identity of the sites means their true significance is not yet fully known or articulated. Clarity on the provenance of the material (both chronologically and geographically) could alter the significance of the sites and may alter the conservation approach to them. A more accurate understanding of the date of the material would be very valuable. This would help target more detailed documentary research which might provide information on the origin and ownership of the wrecks.

4.7.2. It is the intention of this Conservation Statement and Management Plan to provide a mechanism to reconcile the lack of information/understanding about the sites to assist in their management for all.

### **5. Conservation Management Policies**

#### **5.1. Introduction**

5.1.1. This section of the Conservation Statement and Management Plan builds on the Assessment of Significance and the issues identified in Section 4: Issues and Vulnerability, to develop conservation policies which will retain or reveal the site's significance, and which provide a framework for decision-making in the future management and development of the sites or reveal the site's significance and also meet all statutory requirements as well as complying with Historic England's standards and guidance.

5.1.2. It is intended that the policies will create a framework for managing change on the Chesil Beach Wreck Sites that is clear in purpose, and transparent and sustainable in its application. The aim is to achieve implementation through the principles of shared ownership and partnership working so as to balance protection with economic and social needs.

5.1.3. All policies are compatible with, and reflect, Historic England's Conservation Principles for the Sustainable Management of the Historic Environment (2008a) and its published policies and guidelines, as well as the wider statutory framework.

#### **5.2. The Chesil Beach Wreck Sites are a Shared Resource**

5.2.1. The Chesil Beach Wreck Sites form a unique record of past human activity. In addition, the sites are economic assets and provide a resource for education, research and enjoyment. They are also within areas that are protected for their biological and geological significance.

5.2.2. The conflict between the wish for public and professional access to the sites and the restrictions imposed by conservation needs and legislative limitations will be reconciled through continued flexible and appropriate visitor management. Potential impacts of increased diver access in relation to the environmental designations (MPA and SAC) will be considered alongside heritage conservation needs.

5.2.3. Therefore, we must sustain and use the Chesil Beach Wreck Sites in ways that allow people to enjoy and benefit from them, but which do not compromise the ability of future generations to do the same.

Management Policy 1

We will seek to improve authorised visitor access to the protected wreck sites as a mechanism to enhance the value of the sites.

Management Policy 2

We will seek to increase the interpretive material related to the sites, the wider marine historic environment and related protected habitats and species, at appropriate locations and through liaison with English Heritage properties, local museums and local stakeholders.

Management Policy 3

We will maintain and develop the online virtual dive trail for the sites through updating content when new information becomes available.

### **5.3. Everyone should be able to participate in sustaining the Chesil Beach Wreck Sites**

5.3.1. Stakeholders must have the opportunity to contribute to understanding and sustaining the Chesil Beach Wreck Sites. Judgements about their values and decisions about their future will be made in ways that are accessible, inclusive and transparent.

5.3.2. Heritage professionals should use their knowledge, skills and experience to encourage others to understand, value and care for their heritage. They play a crucial role in communicating and sustaining the established values of the wrecks, and in helping people to articulate the values they attach to them.

5.3.3. Education at all stages will help to raise awareness and understanding of such values, including the varied ways in which these values are perceived by different generations and communities. It will also help people to develop, maintain and pass on their knowledge and skills. Where appropriate we will encourage the use of the sites as a training resource.

Management Policy 4

When projects are commissioned on the wrecks, we will seek to use the sites as a training resource where this is appropriate.

Management Policy 5

We will seek to encourage the investigation and continued survey of the sites and the area around their known remains to establish the full extent of the sites.

### **5.4. Understanding the significance of the Chesil Beach Wreck Sites is Vital**

5.4.1. The significance of the Chesil Beach Wreck Sites embraces all the interdependent cultural and natural heritage values that are associated with them. To identify and appreciate those values, it is essential first to understand the structure and nature of the places, how and why they have changed over time, and their present character.

5.4.2. Naturally, any judgements about values are specific to the time they are made. As our understanding develops, and as people's perceptions evolve and places change, so assessments of significance of archaeological sites will alter.



5.4.3. A programme of continual assessment and research is required, to contribute towards a fuller understanding of the sites in their entirety. Such work will conform to the Management of Research Projects in the Historic Environment (Historic England 2015).

Management Policy 6

We will seek to commission a programme of assessment and research to contribute towards a fuller understanding of the sites.

Management Policy 7

We will seek to undertake historical research to explore the hypothesis of wrecks being the remains of the Dutch ship *De Hoop*, the *Squirrel* or any of the other identified potential candidate sites.

**5.5. The Chesil Beach Wreck Sites should be managed to sustain their values**

5.5.1. Conservation is the process of managing change in ways that will best sustain the values of a place in its contexts, and which recognises opportunities to reveal or reinforce those values.

5.5.2. Changes to the Chesil Beach Wreck Sites underwater are inevitable and it is acknowledged that all wreck sites are vulnerable simply because of the nature of their environment (English Heritage 2008b). We will build on the previous work to sustain heritage values, where these values represent a public interest in the Chesil Beach Wreck Sites regardless of ownership. It is therefore justifiable to use law and public policy to regulate the management of the Chesil Beach Wreck Sites as places of established heritage value.

5.5.3. Any measures taken to counter the effects of natural change will be proportionate to the identified risks and will be sustainable in the long term.

5.5.4. Irreversible intervention on the Chesil Beach Wreck Sites may be justified if it provides new information about the wrecks, reveals or reinforces the values of the places or helps sustain those values for future generations, so long as the impact is demonstrably proportionate to the expected benefits.

5.5.5. The effects of changes to the condition of the Chesil Beach Wreck Sites will be monitored and evaluated, and the results used to inform any subsequent action.

5.5.6. If the identity of either or both sites is determined they may require individual management plans or regimes, particularly if this impacts on understanding of the significance of the site and/ or means other nations will be involved in their future management.

Management Policy 8

We will seek to undertake a programme of monitoring with particular consideration being given to the impact of diver activity and commercial fishing within the designation area.

Management Policy 9

If the sites are confirmed as being of non-British origin then we will seek mechanisms to consider shared ownership and partnership with the relevant national authorities.

Management Policy 10

We will seek to ensure that unnecessary disturbance of the seabed within the restricted areas (by fishing and diving) be avoided wherever possible, in order to minimise the risk of damage to buried archaeological material.

#### Management Policy 11

We will seek to ensure that this management plan will be reviewed and updated on a regular basis so that it continues to reflect the conditions and state of knowledge pertaining to the sites. Should the identity of either or both sites be confirmed then they may require separate management plans in the future.

## 6. Forward Plan

### 6.1. Introduction

6.1.1. In order to commence the implementation of the proposed Management Policies outlined in Section 5, Historic England will seek to commence a range of projects that will increase our understanding of the value and setting of the Chesil Beach Wreck Sites. A proposed range of projects is outlined below.

### 6.2. Proposed project in relation to the Chesil Beach Wreck Sites

#### Geophysical or diver-based survey

6.2.1. It is possible that a gradiometer survey with good positional control could help determine the extent of the sites, however, a diver-based metal detector survey is likely to be as effective and less cost-intensive. As concluded by Wessex Archaeology (2016: 19), it is likely that to establish the site extent horizontally and vertically, test pits will be required.

#### Environmental assessment

6.2.2. The dynamic nature of Chesil Beach, along with its range of protections for nature designations means there is likely to be a relatively wide range of data available on the long-term physical changes in the area. A detailed assessment of environmental data in relation to the sites is yet to be undertaken and would be beneficial to gain a more detailed understanding of the natural threats to the sites.

6.2.3. There is a wave buoy located very close to the sites which could provide high resolution data on the wave climate faced by the sites.

#### Enhancement of site survey

6.2.4. There is a need for further non-intrusive site survey, particularly for the Offshore Site 2, to confirm the full extent of the remains. Diver-based searches using visual and metal detector survey should seek to identify further exposed artefacts and potential buried ferrous material.

6.2.5. Detailed survey of individual cannon and further input from experts is likely to enhance understanding of the sites and narrow down candidates for their identity. As this would require removing concretion it is considered below with intrusive investigation.

#### Intrusive investigation

6.2.6. There is a need to gain further information on the cannon on the sites. This requires the removal of concretion to seek to expose a casting date and other markings in addition to more detailed evidence of their proportions. Following removal of concretion, the area should be made good to prevent further deterioration of the cannon.

6.2.7. Evaluation excavation trenches on each site should be considered as they will be the only way to determine the full extent, levels of preservation and character of the sites to aid their identification and future management. There is potential to work with the English Heritage property of Portland Castle to display and interpret the sites following excavation and analysis.

### **Further documentary research**

6.2.8. Extensive documentary sources for English maritime history from the 17<sup>th</sup> century onwards exist, and research into them is likely to help with establishing candidates for the wrecks.

### **Monitoring programme**

6.2.9. Programme of site monitoring to be established and carried out on an annual basis to note any major changes to the site over time. Photogrammetry can be used to collect repeat datasets that will allow direct comparison and measurement of changes between surveys.

## **7. Implementation**

### **7.1. Consultation**

7.1.1. This draft of the Conservation Statement and Management Plan for the Chesil Beach Protected Wreck Sites has been internally reviewed by Historic England and then circulated to a range of stakeholders (see section 7.3.1) to refine how the values and features of the Chesil Beach Protected Wreck Sites can be conserved, maintained and enhanced.

7.1.2. The Conservation Statement and Management Plan for the Chesil Beach Protected Wreck Sites should be periodically reviewed to ensure it is updated and is fit for purpose. If there are changes on the seabed sites, or if either wreck is identified, this should trigger a review of the plan.

### **7.2. Adoption of Policies**

7.2.1. A programme that identifies a timescale for implementing the plan will be devised by Historic England, taking into account those parts which require immediate action, those which can be implemented in the medium or long term, and those which are ongoing.

7.2.2. Responsibilities for implementation of the Management Plan lie with Historic England, though consultation with stakeholders will be maintained throughout. In addition, provision will be made for periodic review and updating of the Management Plan.

### **7.3. Consultation**

7.3.1. The following individuals and organisations were invited to comment on the draft plan:

- Heritage Organisations
  - Historic England, Maritime and Regional Specialists
  - Dorset County Archaeologist
  - Portland Museum
  - Weymouth Museum
- Port Authorities
  - Portland Harbour Master
- Recreational Diving Organisations and Local Diving Establishments
  - Licensee and *Wey Chieftain* skipper Richard Bright-Paul
  - Licensee Giles Adams
  - Old Harbour Dive Centre, Weymouth
  - Underwater Explorers Dive Shop, Portland
- Environmental Groups
  - Southern IFCA
  - Dorset Wildlife Trust
- Other Bodies
  - The Crown Estate
  - Natural England

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## 9. Figures

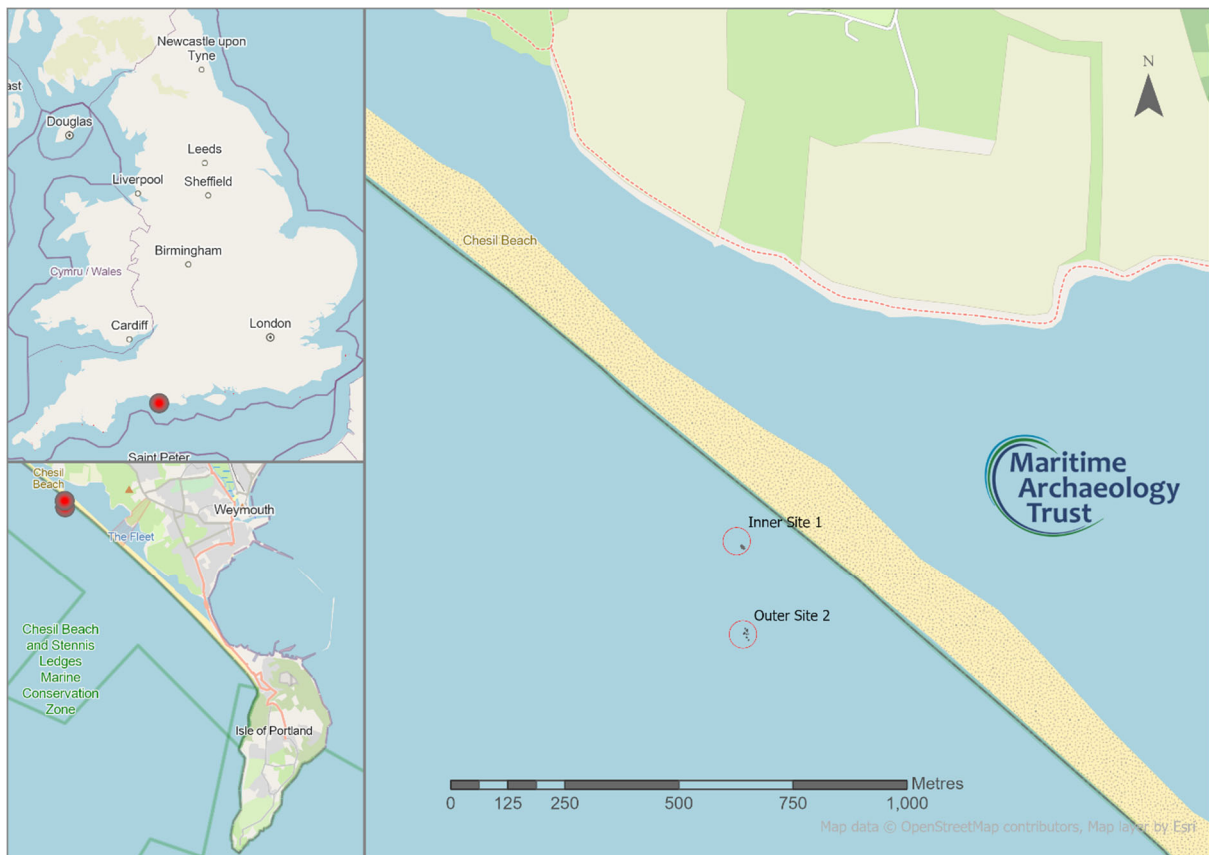


Figure 1 Location of the Chesil Protected Wreck Sites 1 and 2, with 30m radius exclusion zones (red).

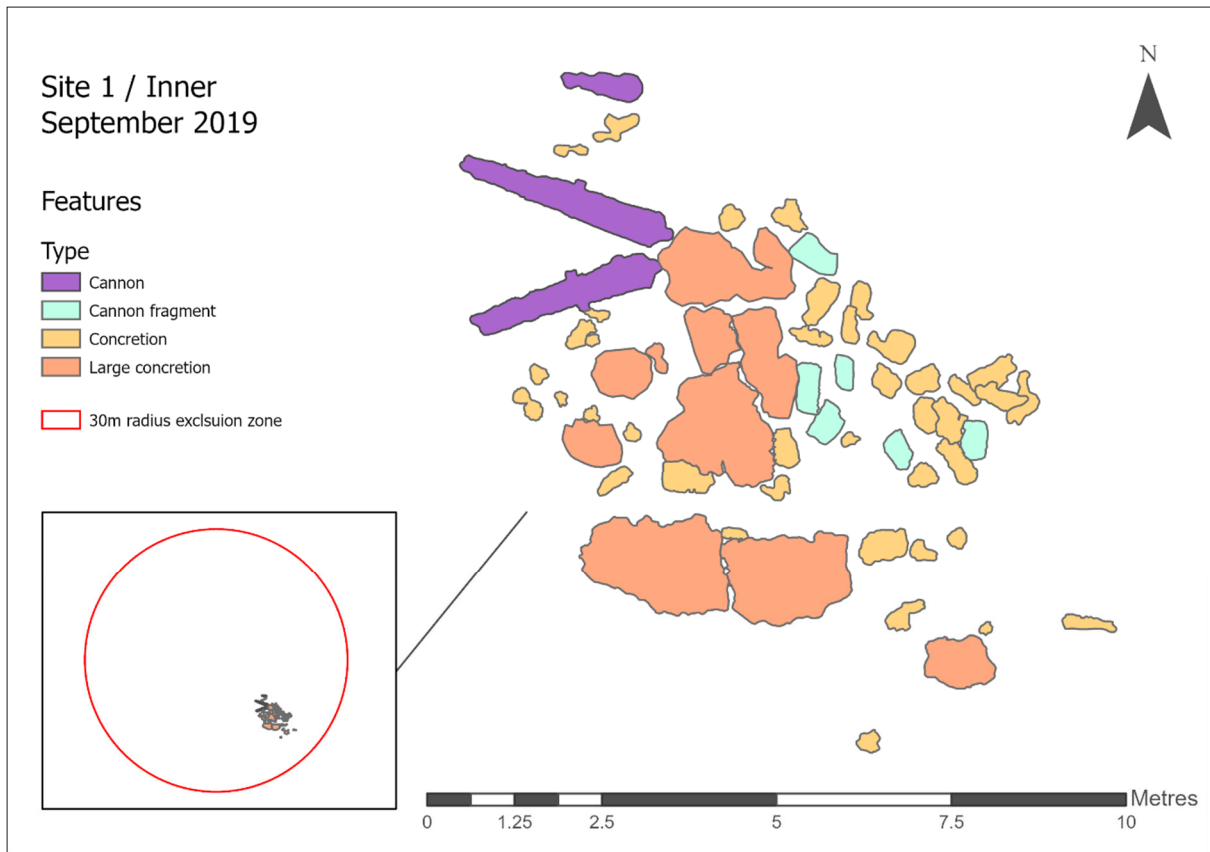


Figure 2: Chesil Beach Wrecks, Inshore Site 1.

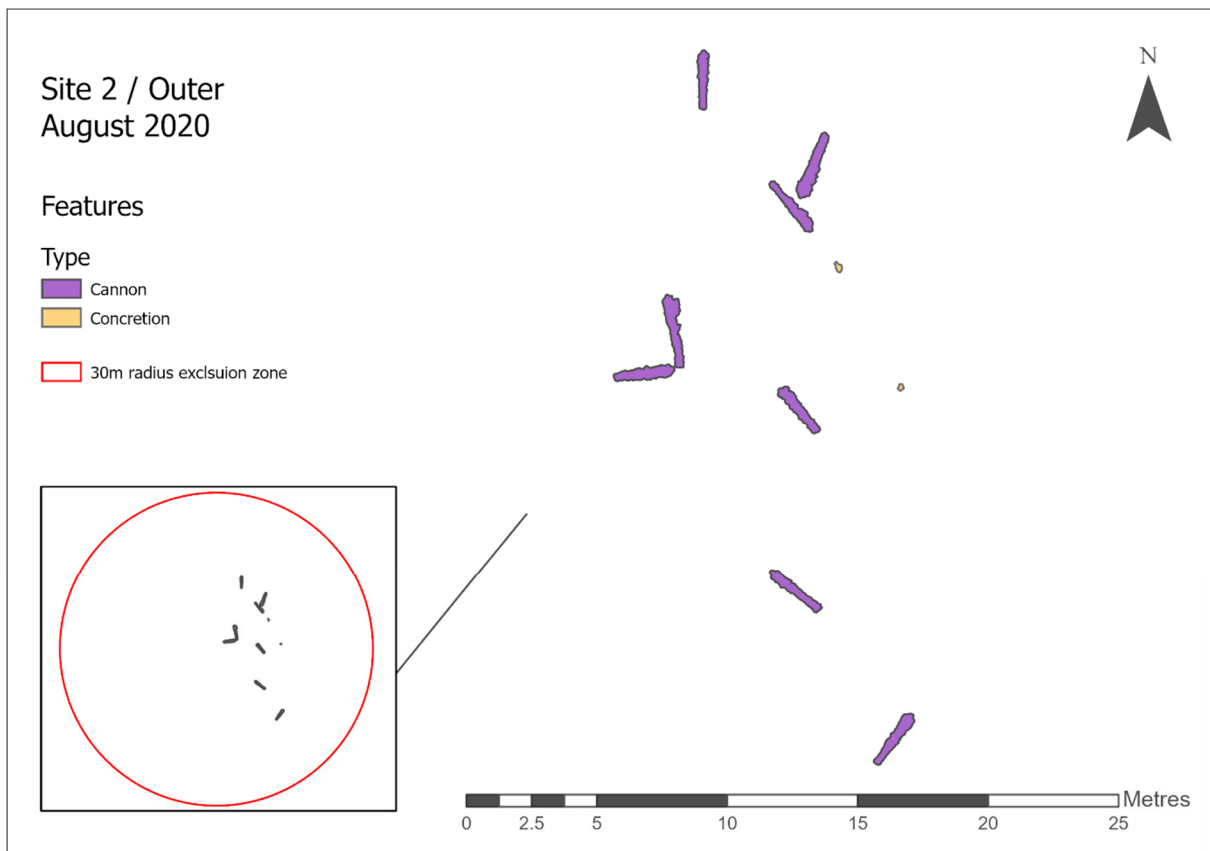


Figure 3: Chesil Beach Wrecks, Offshore Site 2.



*Figure 4: Mound of concreted iron shot and probably also cannon fragments, Inshore Site 1.*