

The Maritime Heritage of Waterford Estuary



An Overview of Heritage Features
& Opportunities

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Foreword

For centuries rivers have been the motorways of the world. Waterford's geographical position has meant that the harbour has been one of the main gateways to Ireland for people and ideas since prehistoric times. Some of the first people to settle in Ireland came through Waterford Estuary and evidence of their activities has been discovered by archaeologists at places like Creadan Head and along the banks of the River Suir. Indeed, there is evidence of early settlements all along the shores of Waterford Harbour.

It was the Vikings who established the port town here in 914, calling it Vedrarfjodr (haven from the windy seas) which over time changed to Waterford. The city's strategic importance is well illustrated by its part in the Anglo-Norman invasion of Ireland and especially when Henry II sailed into Waterford Harbour in 1171 making Waterford a royal city. Following the Anglo-Norman invasion of Ireland, William Marshal built a lighthouse on Hook Head in the 1200s and this is now the oldest working lighthouse in the world.

By the 1200s the port city of Waterford was a wealthy and sophisticated place. Exports included wool, hides, wheat, oats, malt and salted fish and imports included salt and luxury goods such as wine, figs, dates and silk. From medieval times Waterford City Council claimed jurisdiction over the entire harbour and for centuries the village of Passage East was regarded as part of the city.

The 18th century saw the expansion of Waterford port. The area prospered through the export of agricultural produce, especially salt pork, salt beef and butter, much of it destined for Newfoundland. The increase in trade also saw the development of several vibrant communities in the harbour especially at Cheekpoint, Passage East, Ballyhack, Duncannon and Dunmore East. In fact, for many years larger ships anchored at Passage East and it was from here that many thousands of people left Ireland to work in the Newfoundland cod fisheries.

A regular passenger, cargo and mail packet service operated between Waterford Harbour and Wales from 1750. In the early years the ships stopped at Cheekpoint with passengers and mail transferred to Waterford by coach. With the wider use of steam power and dredging of the navigation channels, most ships eventually made their way right up into the city of Waterford, docking at the city's quays. The service from Waterford to Wales continued until 1966 on the Great Western, a ship that is fondly remembered.

In the 19th century some of the most important shipyards in Ireland developed at Waterford, first of sailing ships, then steamships. The very first sailing ship to import tea directly into Ireland from China was built at White's shipyard. Five transatlantic steamships were built for the London-Le Havre-New York lines at the Neptune shipyard in Waterford. As well as building, crewing, and providing supplies for the ships of the day, the estuary was also fished since the earliest times. The recent fall off in salmon fishing was a devastating economic blow to villages like Cheekpoint, Passage East, Ballyhack and Duncannon.

Port of Waterford wants to help ensure the skills of the people are passed on for future generations and also support the area by promoting opportunities to develop the economic wellbeing of these beautiful estuarine villages. This report gives us a very full account of how the villages on both the Wexford and Waterford sides of the estuary became such vital cogs in the trading success of Waterford City and laterally how fishing became central to the villages' economic wellbeing. In this report Dr Foley also highlights the opportunities that exist to develop sensitive tourism initiatives and community projects that will maintain the boat building, fishing and maritime skills developed over centuries. In commissioning and championing this report, Port of Waterford wants to acknowledge the role Cheekpoint, Passage East, Duncannon, Dunmore East, Ballyhack and Arthurstown played in the economic growth of the area. In doing so we also hope we can help promote the wonderful history of Waterford Estuary and through tourism and community support enhance the villages aesthetically and economically.

In 2005 and 2011 Waterford hosted the Tall Ships Races and on each occasion over 80 majestic sailing ships thronged the city's quays attracting hundreds of thousands of visitors from around the world. The undoubted highpoint of these festivals was the spectacular 'parade of sail' down the River Suir and passing by the historic sea-faring communities of Waterford Harbour and out onto the high seas.

Once again Waterford and its harbour communities reclaimed its well-deserved title – Waterford of the Ships.

Des Whelan

Chairman

Port of Waterford.

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Commissioned by: Port of Waterford



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1. Introduction

Recognised through the centuries for its strategic and economic location, natural attributes and resources, Waterford Estuary has a rich maritime heritage. It includes a diverse range of flora and fauna and varied seascapes, some of which are of international and national importance; a built heritage including forts, lighthouses and piers; and shipwrecks dating to the 16th century. The area has a long history in shipping and fishing and much of the heritage has evolved from these two industries. It is a gateway to the Barrow, Nore and Suir rivers and offers safe and scenic cruising grounds. The estuary provides a natural public amenity including an attractive coastline and beautiful beaches to be enjoyed by all. Connecting all of this is the intangible cultural heritage of Waterford Estuary; place names, skills, knowledge and stories. The maritime heritage of the estuary holds great cultural and natural importance for many and contributes to the identity of the estuarine community.

1.1 Purpose and Objectives of the Study

The Harbour is shared by a range of estuarial stakeholders and activities including fishing, leisure, tourism, and commercial activities. The Port of Waterford Masterplan 2019 – 2044 seeks to set out a balanced and sustainable menu of potential actions across all of the Port's activities. The plan includes aims to implement specific community projects or sponsorships, preserve and protect biodiversity and cultural heritage, minimise coastal erosion, adaptation to climate change effects, maintain water quality and support sustainable development¹.

This report was commissioned by Port of Waterford to provide an overview of the natural and cultural heritage of Waterford Estuary. It catalogues the maritime heritage features of Waterford Estuary and outlines opportunities for the future sustainable development, promotion and preservation of this heritage that could benefit the estuary community. It aims to:

- Increase awareness of the maritime heritage of Waterford Estuary
- Contribute to a sense of community, pride and place through sustainable social and economic development
- Strengthen and build on current community development projects such as those funded by FLAG and LEADER
- Promote preservation and enjoyment of maritime heritage²

1.2 What is Maritime Heritage?

Maritime heritage has cultural, physical and ecological dimensions. It embraces the legacies of past generations that derived a living from the sea, including their traditions, as well as natural features of coastal environments along with their associated plant and animal communities. From the definition of heritage in the Heritage Act, 1995, maritime heritage covers both terrestrial and water-based elements including fisheries, wildlife habitats, flora and fauna, seascapes, wrecks, coastal monuments and other features of archaeological interest or importance³. It also includes intangible heritage such as the naming of places and physical features, folklore, customs and beliefs, knowledge of the sea and traditional craftsmanship.

Maritime heritage is at risk today from various pressures such as climate change, pollution, loss of traditional fishing methods and neglect. Heritage in all its forms should be treated with respect and care but it should also be enjoyed and experienced. Only through appreciation of our natural and cultural heritage can we ensure its preservation for now and for future generations⁴.

¹<http://www.portofwaterford.com/corporate-documents#a-master-plan>

²This is also an objective within Ireland's National Marine Planning Framework approved by Government March 2021.

³Policy Paper on Conserving Ireland's Maritime Heritage. The Heritage Council (2006).

⁴Waterways Ireland Heritage Plan 2016 - 2020

1.3 A Collation of Maritime Heritage of Waterford Estuary

The Heritage Council prepared a policy paper on Conserving Ireland's Maritime Heritage in 2006. It advocated greater recognition of our maritime heritage and the significant role heritage can play in the development of Ireland's marine and coastal resources. Using the Heritage Council paper as a guide to heritage features⁵, this report categorises and gives a general overview of the maritime heritage of Waterford Estuary.

The classification of maritime heritage identifies a broad, deep heritage. It is neither an inventory nor a full evaluation of the maritime heritage⁶. This report draws extensively from publicly available documents but does not attempt to summarise them or represent all findings. Almost every section of the maritime heritage of Waterford Estuary warrants further research and analysis. Table 1 provides a summary of the categories of maritime heritage in Waterford Estuary and examples of each.

This report takes a holistic view of the estuary. There are topographical, environmental and historical differences along the estuary. Each village has its own unique features. While the area is not a homogenous unit, it is all these features combined that make Waterford Estuary an area rich in maritime heritage.

⁵This report includes heritage features that are not included in the Heritage Council report.

⁶There is a wealth of heritage on Waterford Estuary that is not maritime. This does not feature in this report.

	Maritime Heritage	Examples
Natural Heritage	Seascapes	Strands Bays Cliffs Caves Woodland
	Biodiversity	Flora Fauna Ecosystems & habitats Geology
	Protected Areas	SAC pNHA
	Threats to Natural Heritage	Climate Change Human Activities Marine Litter Water Quality
Cultural Heritage	Traditional Fisheries	Type: salmon, eel, herring Methods Skills Community
	Boat Building	Ballyhack yawl Punt Prong Estuary Regattas
	Built Heritage	Lighthouses Forts Castles Weirs Martello Towers
	Archaeological Heritage	Forts Ship wrecks
	Marine Leisure	Sailing and boating Boat tours and angling Walking Swimming Kite-surfing
	Shipping and Transport	Port of Waterford New Ross Port Ferry Trades e.g. hobblers, lightermen
	Intangible Cultural Heritage	Connected with many aspects of marine heritage Placenames Stories

Table 1: Summary of Heritage Features in Waterford Estuary

1.4 Heritage and Community Regeneration

Seamanship and fishing have formed an important part of the estuary. Fisheries have faced a general decline and the impact of this is evident in Waterford Estuary. The socio-economic review finds that unemployment rates in most of the villages are above national average and the demographic structure reflects an aging population. Most of the villages are below average with regard to deprivation. Heritage can be a strong driver for regeneration, making an important contribution to community pride and sense of place. Maintaining and enhancing our heritage provides a basis for local sustainable social and economic development. Within each category of maritime heritage this report identifies opportunities that may provide the impetus for regeneration initiatives. Regarding the order in which opportunities are presented, no priority is either intended or implied.

These opportunities can only be achieved through coordination and cooperation of all bodies including state agencies, businesses, NGOs and the local community. Lacking at present is a **community representative structure** that can act as an interface between the estuary community, local development bodies and national structures. A recommendation of this report is for such a structure to be developed with representatives for each village as well as relevant stakeholders⁷.

Waterford Estuary has a diverse range of flora and fauna. There are three SACs in the estuary which form part of the Natura 2000 network of sites under the EU Habitats Directive. They are designated because they offer core breeding and resting grounds for rare or threatened species, and some rare natural habitat types. While these sites do not exclude human activities, it must be ensured that they are managed in a sustainable manner, both ecologically and economically.

The next section gives an overview of estuary area, this is followed by the classification of maritime heritage. Finally section 4 discusses the opportunities arising from the report and implementation.



Brendan Grogan ©

⁷In developing Fishery Local Action Groups committees were established to represent an area. It may be worthwhile investigating how these were formed, lessons learned etc.

2. Waterford Estuary – Area Description

2.1 Location and Setting

Waterford Estuary, made up of the combined waters of the rivers Barrow, Nore and Suir, is a naturally wide harbour that opens to the sea. The entrance to Waterford Harbour lies at the mouth of the estuary between Dunmore East and Hook Head. The entrance is approximately 2 nautical miles wide and marked on the west by Hook Head Lighthouse and a port buoy at the 10m CD contour to the east of Dunmore East. The marine access to the Port of Waterford is shown on Admiralty Chart 2046 – Waterford Harbour.

The estuary comprises villages in both counties Wexford and Waterford. There are six villages on the estuary. Dunmore East, Passage East and Cheekpoint are located in Co. Waterford. Duncannon, Ballyhack and Arthurstown are located on the Wexford side of the estuary. The study area incorporates both sides of the estuary.

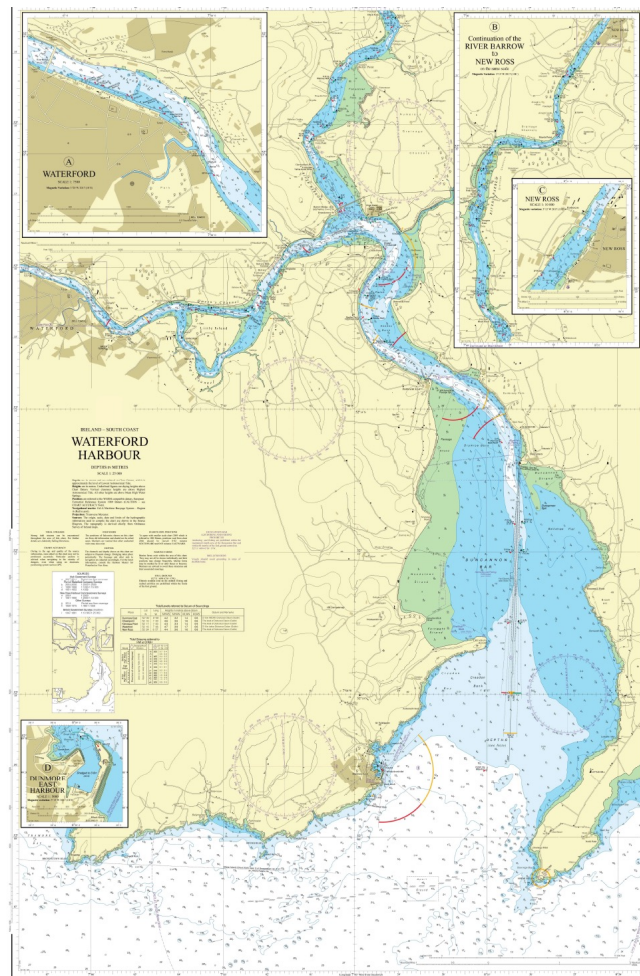


Figure 1: Waterford Estuary Admiralty Chart. © Crown Copyright and/or database rights. Reproduced by permission of The Keeper of Public Records and the UK Hydrographic Office (www.GOV.uk/UKHO)

2.2 Socio-Economic Overview

Many coastal and fisheries areas are facing a general economic decline often combined with an aging population or depopulation⁸. There are few fishermen left as younger people move to the cities to take advantage of better educational and employment opportunities. The impact of these changes often goes beyond the fisheries sector, affecting also the wider community. The result can be a downward spiral in both the local economy and service provision. The following presents a socio-economic review of the villages on Waterford Estuary.

Waterford Estuary comprises five electoral divisions (ED); Killea (Dunmore East), Woodstown and Faithlegg (Passage East & Cheekpoint) in Co. Waterford and Templetown and Ballyhack (Ballyhack, Arthurstown & Duncannon) in Co. Wexford. At ED level the overall area is in line with national averages for 2016⁹, with the exception of Ballyhack ED which is below average.

However, it would be remiss to look at the performance of the estuary purely at the ED level. Both Cheekpoint and Passage East are within an ED that contains some highly affluent areas resulting in an ED above average. At ED level these two villages could go unnoticed in terms of their needs and economic status. By looking at the estuary villages at the small area (SA) level it is possible to get a true picture of the socio-economic profile of the estuary villages¹⁰.

- The Pobal HP Deprivation Index measures the relative affluence or deprivation of a particular area using data compiled from the national census. This index is based on three dimensions of affluence/disadvantage: Demographic Profile, Social Class Composition and Labour Market Situation.
 - › Duncannon consists of two SA one of which and all of Ballyhack are considered disadvantaged in the Pobal Deprivation Index
 - › Passage East, Cheekpoint, Duncannon and Arthurstown are below average with regard to deprivation
- Unemployment by village at the SA level shows a variance in unemployment rates with most being above the national average. Both Arthurstown and areas of Dunmore East were below the census average unemployment. Cheekpoint, Passage East, Ballyhack and Duncannon showed higher unemployment rates than the national average.
- The demographic structure of the villages reflects an aging population. Relative to the State average of 13.4% the estuarine villages have a much older population profile of residents aged 65+ ranging from 17% to 30%.
- There has been a growing improvement in the level of education amongst the adult population over the past 25 years throughout Ireland. In 1991, 36.7% of the population had primary education only. By 2016 this had dropped to 11%. The same positive trend applies for third level education where the percentage of the adult population with a third level education has grown significantly. In 2016 42% of the population had third level education compared with 13.6% in 1991.
 - › For Waterford Estuary the SA level those with primary education only for 2016 ranged from 12% (Cheekpoint) to 23% (Ballyhack).
 - › The villages on Waterford Estuary are defined by a lower level of adults with third level education than the national average (42% in 2016) ranging between 12% and 30%.

⁸Diversification of Fisheries Areas, Farnet Guide 5. European Commission Maritime Affairs and Fisheries.

⁹This information is drawn from 2016 census data. The next census is due in 2022.

¹⁰Dunmore is the largest settlement in Waterford Estuary. It is one of five national fishery harbour centres. It is made up of a number of small areas. Overall Dunmore is marginally above average in terms of affluence and is inline with national averages.

The villages on Waterford Estuary are an example of the economic decline experienced by many fishing communities. These villages have been traditionally dependent on fisheries activities as a source of employment, income and community.

This initial analysis indicates that these villages warrant an economic stimulus to encourage local regeneration initiatives, support social cohesion and sustainable development. Any such stimulus could embrace and utilise the values, knowledge and skills of the fishing and maritime communities, thereby contributing to an improved sense of community, pride and place.



Tomas Sullivan photos

3. Waterford Estuary – Natural and Cultural Heritage

Estuaries (sometimes referred to as harbours) are partially enclosed bodies of water along coastlines where fresh-water and salt-water meet and mix. They act as a transition zone between sea and land. At low water, there can be extensive areas of mudflats or sandflats. Estuaries are important for many reasons:

- They are vital habitats for marine species including fish, birds, mammals, crustaceans, plants and algae
- They act as a buffer between the ocean and land, reducing the effects of flooding and storm damage
- They are economically important (e.g. shipping, fishing, angling and tourism)
- Estuaries are a popular recreational destination¹¹

Waterford Harbour is rich in natural and cultural heritage with an interesting and varied landscape. The cultural heritage includes traditional fisheries, boats native to the area, fishing weirs, ship wrecks and buildings including castles, piers and forts. It is an important nursery ground for many species of fish and a natural shellfish production area. Waterford Estuary hosts a diverse range of birds, a variety of aquatic and terrestrial mammals and is where the ‘Three Sisters’ rivers meet. There are three SACs in the estuary which form part of the Natura 2000 network and six proposed National Heritage Areas (pNHA). Waterford Estuary is also important for commercial shipping providing access to the Port of Waterford and New Ross Port. It is a gateway to the Barrow, Nore and Suir rivers and offers safe and scenic cruising grounds. The following presents the natural and cultural heritage of Waterford Estuary.



3.1 Natural Heritage

3.1.1 Seascapes

Waterford Estuary is characterised by small fishing villages in proximity to bays, inlets, coves, cliffs and beaches. It has a varying coastline including cliffs, mudflats, pebble and sandy beaches. Sea cliffs feature at both sides of the mouth of the estuary. Sandy beaches are a feature of Waterford Estuary including Duncannon Strand, Woodstown Strand, Passage Strand and Councillors. There are deciduous woodland fringes along the upper estuary. The Barrow Bridge crosses two of the rivers, the Barrow and Nore, before they join the Suir downstream of the bridge. Where the Three Sisters meet is known as Cumar na dTri Uisce (the confluence of the three waters). The combined waters of the Three Sisters can be seen from Cheekpoint and flow out to sea through the Waterford Estuary.

Small secluded bays and inlets are dotted along the estuary. Many of these are not named on a map and names are only known locally. The value of the seashore as a communal resource in the Hook led to creation of an intricate system of coastal place names of complex origin¹². These place names for the Hook Peninsula were mapped in 2004. This covered the area from Hook Head up to Harrylock Bay. For the upper estuary, placenames have been mapped from Cheekpoint to Ballyhack and Passage East¹³. As an intimate knowledge of the seashore is no longer necessary, the names are becoming irrelevant and could eventually be forgotten. Place names along the estuary are being lost with the passing of each generation and offer a unique insight into navigation, fisheries, shipping and other maritime heritage.



¹¹https://www.wit.ie/research/centres_and_groups/estuarine_research_group#tab=panel-1

¹²Colfer, B. (2004). The Hook Peninsula, County Wexford. Irish Rural Landscapes: Volume II. Cork University Press

¹³Before the Tide Went Out, p13, A Doherty (2017).

Opportunity

- Mapping of Local Place Names

Many bays have names known only to those that fished the area. If these are not documented, they will be lost. Carry out a mapping exercise of all the bays, inlets, quays and local place names along the estuary. A detailed local mapping of the entire estuary will build on work by A. Doherty (2017) and B. Colfer (2004).

3.1.2 Biodiversity

Biodiversity is the huge variety of plants and animals, from lichens to seaweeds, from insects to birds and mammals, that characterise maritime ecosystems and the genetic variation in each species. Through its role in the construction and maintenance of marine ecosystems, biodiversity provides natural goods and services that support human welfare, and, ultimately, life on the planet¹⁴. Each marine or coastal habitat has its own plant and animal community. Many species depend on more than one habitat for different stages of their life cycle.

Waterford Estuary has a wide variety of habitats and species some of which are of special conservation interest, by virtue of being nationally or internationally important. Ecosystems and habitats include the estuary itself, intertidal mudflats and sandflats, salt meadows, sea cliffs, open sea, beaches and shallow bays. Waterford Estuary hosts a diverse range of birds, a variety of marine and terrestrial mammals and is an important nursery ground for many species of fish. Protected species in the estuary include salmon and otter. Some of the best examples of honeycomb reefs can be found on the estuary. There are also several important geological features in the estuary and a diversity of rock types with oldest rocks belonging to the Cambrian period dating back approximately 500 million years. A variety of fossils have been collected providing an important timescale and evidence of climate over time.

Habitats that are rare and threatened throughout Europe are listed under the EU Habitats Directive, which obliges member states to designate Special Areas of Conservation (SACs) to protect them¹⁵. The Directive lists certain species and habitats that must be protected within SACs. There are three SACs in Waterford Estuary:

- Lower River Suir SAC
- River Barrow and Nore SAC
- Hook Head SAC.

National Heritage Areas (NHA) are sites of national importance by reason of their flora, fauna, geological or physiographic interest. There are no designated NHAs in the estuary. In addition to NHAs there are proposed National Heritage Areas (pNHA). These are sites which have not been designated yet; there are plans to gradually designate them. They are sites of significance for wildlife and habitats. These sites are subject to limited protection. pNHAs in Waterford Estuary are:

- Duncannon Sandhills
- Ballyhack
- Dunmore East Cliffs
- Hook Head
- Waterford Harbour and River Barrow as far as New Ross
- Creadan Head

¹⁴Conserving Ireland's Maritime Heritage, Heritage Council (2006)

¹⁵<https://www.waterfordcouncil.ie/media/heritage/Waterford%20County%20Biodiversity%20Plan.pdf>

The estuary is used by significant numbers of passage and wintering waders and waterfowl and is also important for breeding seabirds. These include Black-tailed Godwits at the mudflats near Cheekpoint during winter. Cheekpoint and Ballinlaw Marshes have sizeable populations of the recently colonising Little Egret. Little Island has a heronry of national importance. The mussel bed off Passage East attracts Oystercatcher, Redshank and gulls. Large numbers of Cormorants are often present offshore. Other species to the area include Ringed Plover, Lapwing, Turnstone, Common and Black-headed Gull, Brent Geese, Red-breasted Mergansers, Great Crested Grebes, Bar-tailed Godwits, Sanderling, Knot, Sandmartins, Water Rails, Sedge Warblers, Fulmar, Herring Gull, Kittiwake, Gannet and Razorbill¹⁶. Dunmore is known for its kittiwake colonies. Brent geese are seen in numbers at Arthurstown Bay and along the shoreline from Arthurstown to Duncannon. Kingfisher can also be seen in the upper estuary.

Fish species recorded include salmon, eel, mackerel, plaice, cod, sprat, smelt, lesser weaver, herring, goby and pipefish to list but a few. Among these are internationally important fish species including Atlantic Salmon, European Eel and European Smelt. Waterford Harbour is a Designated Shellfish Area and has also been identified as a shellfish growing area by the SFPA. There are four distinct production sites as part of the mollusc production zone, they are at Cheekpoint and Arthurstown (mussels); Woodstown (oysters) and Harrylock Bay (clams)¹⁷. Basking sharks can be seen off Hook Head from April to July when they come to Irish waters to feed.

Among the marine mammals sighted in the estuary are common dolphin, harbour porpoise, bottlenose dolphin, common (harbour) seal and grey seal. The availability of prey is one factor that draws species to an area. Large pods of dolphins are observed in particular when shoals of sprat are in the estuary. Species observed outside of / at the mouth of the estuary include; harbour porpoise, Risso's dolphin, fin whale, long finned pilot whale, humpback whale and minke whale. Terrestrial mammals include otter, badger, and fox.

Common invertebrate fauna include lugworm, sand mason worm, and common cockle. An extensive area of honeycomb worm biogenic reef occurs adjacent to Duncannon. The honeycomb reef is created by a small worm (*Sabellaria albeolata*) that lives inside small tubes that it builds from sand and shell. When thousands of these worms work together they can form a massive reef along the coastline and form useful habitat for other marine life. Coastwatch Ireland has been mapping the distribution of these reefs and have found the highest density in the South East to occur in Waterford Estuary.

The dunes which fringe Duncannon Strand are dominated by marram grass. Other species include wild clary/sage, a rare Red Data Book species. The rocks around Duncannon Fort have a rich flora of seaweeds and the cliffs themselves support a number of coastal species on ledges including thrift, rock samphire and sea-buckthorn.



¹⁶http://www.waterfordbirds.com/sites_wathbr.html

¹⁷<https://www.sfpa.ie/What-We-Do/Molluscan-Shellfish/Classified-Areas>

3.1.3 Threats to Biodiversity and Seascapes

All of Ireland's estuaries and coastal waters are impacted to some extent by human activities. Estuaries experience siltation as a result of farming and construction upstream. Navigation channels and harbours have been deepened by dredging, changing current patterns and communities of bottom living organisms. Fishing, particularly bottom fishing, has in some places altered benthic habitats. Waters have also been contaminated from rivers, sewage disposal and the atmosphere¹⁸. There is also the issue of marine and other litter being disposed of in waters.

Water Quality

The need to maintain water quality is key to conservation of biodiversity and water dependent habitats and species. Blue Flag is an internationally recognised award for beaches, marinas, and sustainable boating tourism operators. In order to qualify for this award, a series of stringent environmental, educational, safety-related and access-related criteria must be met and maintained. To receive a Blue Flag a bathing site must, in addition to maintaining a high standard of water quality, meet specified objectives with regard to the provision of safety services and facilities, environmental management of the beach area and environmental education¹⁹. At beaches, the bathing water must comply with the excellent standard in accordance with the 2006 EU Bathing Water Directive. For beach users, the Blue Flag award is an important and well recognised indication of water quality. The 2020 Blue Flag Beaches on Waterford Estuary are Dunmore Strand and Councillors Strand. New Ross marina also holds a Blue Flag.

Duncannon Strand held the Blue Flag from 1988 – 2007. It lost its status in 2007 due to poor water quality. Raw sewage entering the water from two streams and run off from farms are two reasons that water quality has been on occasion reported as poor. Bathing water quality is currently listed as 'good' by the EPA. The Duncannon Blue Flag Farming and Communities Scheme, 2018 – 2021, is aimed at improving water quality and regaining the Blue Flag²⁰.

In addition to Blue Flag, there is the Green Coast Award. The Green Coast Award recognises beaches of high environmental quality; beaches must have excellent water quality and appropriate management to ensure protection of the natural environment. Booley Bay is a current Green Coast beach.

Litter / Marine Stewardship

Litter found along coasts, beaches and in the water comes from a number of sources including: fly tipping, shipping, sewage related debris, fishing and the public. Waterford County Council are currently working with local boat operators to remove marine and other litter from otherwise inaccessible areas of the estuary. Boat owners with a familiarity of the estuary, with representatives on the Wexford and Waterford side, are gathering litter and delivering it to a point for the council to remove. They are also documenting the type of litter being found in the areas. It is a project funded through FLAG²¹.

¹⁸Policy Paper on Conserving Ireland's Maritime Heritage. The Heritage Council (2006)

¹⁹Beachawards.ie

²⁰There remains the issue of raw sewage. Construction is due to begin in 2021 on a new wastewater treatment plant with anticipated completion in 2023.

²¹Fisheries Local Area Action Groups

Climate Change

In the marine environment, climate change impacts include increases in sea temperature, storm intensity, wave height and sea level, as well as possible changes in ocean currents. Such changes may have profound implications for heritage in the marine and coastal area.

Coastal erosion is evident throughout the estuary including Woodstown Strand, the sand dunes at Duncannon Strand, Passage East and Booley Bay. Pacific Oyster and mussels are cultivated commercially at Woodstown Strand. The output of this fishery is dependent on water quality and in recent years there has been a growing threat from reported increased water temperatures at Woodstown²².

An increase in mean seawater temperature will affect species which currently occur at the extremes of their temperature tolerance range, leading to northerly shifts in the range of plankton, enhanced recruitment of some species (e.g. bass) and a decline in some wild populations (e.g. salmonoids). On a wider scale it will impact on biodiversity through species losses, new arrivals and greater incidence of invasions of non-native species, for example rock oysters. Increased water temperatures in shallow bays and inlets lead to changes in the structure and stability of plant and animal communities²³.



²²McGrath, R. (2015). Waterford Estuary Area: A Community Led Mapping and Audit of its Natural and Heritage Resources

²³<https://www.coastalheritage.ie/>

Opportunities

Management, Monitoring and Maintenance

The marine environment provides a wide range of services which underpin health and wellbeing, regulate climate and support fisheries, aquaculture, tourism and recreation. There are many impacts on the marine biodiversity and ecosystems including pressures from fishing, climate change, habitat loss and pollution from land and sea based activities. Establish a program of management, monitoring and maintenance to protect the ecosystem goods and services provided by the estuary and establish an estuary that is aware of its marine environment

- **River Rangers**

Continue and develop the marine litter program established by Waterford County Council. This would involve contracting fishers with a knowledge of the area to collect litter from the estuary only accessible by boat, compensating for expenses and time. The work involved would include recording the type of litter collected and location. As well as keeping the estuary free of litter and debris, the rangers would also closely monitor the area for coastal erosion, pollution and other threats. Use this initiative to raise public awareness of the impact of litter on the estuary and along coasts educating on the impact of litter on the marine environment, habitats, flora and fauna and also on fisheries. In accessible areas, beaches, bays, coves, promote the Clean Coasts initiative and encourage community involvement.

- **Blue Flag and Green Coasts**

Work with County Councils to achieve excellent water quality and environmental recognition. Strive to achieve and/or maintain Blue Flag status at as many beaches as possible. Where beaches do not have the appropriate infrastructure for Blue Flag, aim for Green Coasts Awards.

- **Harnessing Fishers Knowledge to Maintain and Protect Biodiversity**

With an intimate knowledge of the estuary, local fishers can make a valuable contribution to issues impacting biodiversity and seascapes. Harness the knowledge, experience and resource base of the fisheries sector. This will involve cooperation between fishermen and scientists for data collection and research. Work with local fishermen and stakeholders to map and collect information on invasive species and observed changes in marine habitats, ecosystems, flora and fauna.

- **Raise Awareness of Waterford Estuary Biodiversity**

Raise public awareness of marine biodiversity, assets and maritime heritage. Create information boards, leaflets and displays to promote biodiversity. A recent FLAG funded project undertaken by Duncannon Village Renewal designed information boards promoting biodiversity including information on birds, shore angling opportunities and the biodiversity of rock pools and along the shore.

- **Education**

Develop a program to engage and educate people, particularly children and young people, in local marine biodiversity and heritage. Design information booklets and activity sheets, competitions such as crab fishing, and organise educational tours on topics such as rock pooling, fossil hunting and all aspects of maritime heritage. Promoting a greater understanding of the sea and its importance at a local and global level.

3.2 Cultural Heritage

3.2.1 Traditional Fisheries

Dunmore is the main fishing port in Waterford Estuary and one of six designated national Fishery Harbour Centres (FHC). Duncannon is the next most significant harbour for fish landings in the area. Fishing within the estuary includes trawling for sprat, a small winter cod fishery, whelk and surf clam. There is also a fishery for razors which requires a licence. The razor clam stock is distributed in two areas in Harrylock Bay and on the west side of the estuary at Creadan Head. Aquaculture for oysters is carried out in Woodstown. There was a local mussel co-operative established in the estuary but fishing no longer takes place due to mussel die back.

Traditionally fishing provided an important source of income for many households along the estuary. Fisheries that were important to the estuarine community included drift netting for salmon and herring. Fishing for eel was carried out in the upper estuary. The herring fishery at sea from Dunmore with mid-water trawls is also a part of the local heritage and is well documented. Passage was also a significant location for the herring fishery. A fish house was built in Passage East in 1901 for the curing of herring as well as the storing and sale of other fish. This onshore work was predominantly carried out by women, initially requiring skilled labour, Herring Lassies came from Scotland to prepare herring for process²⁴. Women played a central role to the local fisheries, including the cockle women who picked cockles along the estuary and transported them for sale.

There has been a decline in traditional fishing practices on the estuary as a result of efforts to preserve fish stocks. The closure of the drift net salmon fishery and the eel fishery are two of the key issues that have affected the traditional small scale estuarine fisheries. The herring fishery is also of cultural significance to the area. The following gives an overview of the salmon and eel fisheries.



²⁴<https://tidesandtales.ie/passage-east-fish-house/>

Salmon Fishing

Salmon begin their lives in freshwater, migrate to sea as juveniles, grow to large size at sea and then return to their native river to spawn and beget the next generation. They pass through estuaries on their way to sea as juveniles and on their return from the sea as maturing adults²⁵.

Commercial fishing for salmon was carried out using drift nets, draft nets or snap nets. In the estuary, from the Barrow Bridge, drift-netting was used to catch salmon. Management was by way of commercial salmon licences issued by SRFB (Southern Regional Fisheries Board – now Inland Fisheries Ireland / IFI) and season. The salmon fishery was based in the harbours of Ballyhack, Duncannon, Arthurstown, Passage and Cheekpoint. Originally the season ran from February to mid-August. With declining stocks, the drift net season was restricted both in duration (1st June -31st July) and time allowed for fishing (4am to 9pm). A mandatory tagging and log book scheme was introduced in 2001²⁶.

In 2007 the introduction of single stock management for salmon led to the cessation of drift netting or any other form of harvesting outside of rivers and estuaries. The closure of drift net fishing was supported by a government 'Hardship Scheme' which allowed a voluntary buyout to all commercial salmon licence holders who held a licence for the 2006 season. The 'Hardship Scheme' was administered by BIM and the Regional Fisheries Boards. On accepting the Salmon Hardship Scheme, a person is not eligible to apply for a future fishing licence should the fishery reopen.

The future harvest of salmon, by any means will be restricted to rivers, bays and estuaries, and to those stocks from rivers that are meeting their conservation limit (CL). This means that there will no indiscriminate capture of fish. Commercial fishing and recreational angling can continue only on the scientifically identified exploitable surplus. For Waterford Estuary this is dependent on the three rivers, Barrow, Nore and Suir, being above their CL²⁷.

Eel Fishing

In the estuary study area, eel fishing was carried out in Cheekpoint. Little or no eel fishing occurred downstream of Cheekpoint. Fishing for eel was by way of public licence. Baited eel baskets were used to capture eels during the months April to September. Bait was captured using 'sprat' weirs. Baited baskets / pots were hauled twice daily to avoid heavy predation by crabs.

In 2008, the eel fishery was closed under Ireland's eel management plan. In consideration of the economic and social impacts of Ireland's Eel Management Plan, the eel support scheme fund was opened in 2018. The fund was made available to former eel fishermen who were the holder of a State commercial eel licence or an eel fishing permit in the 2007 season (base year). The scheme provided payments to former fishermen based on their track record in the five year period 2003-2007. The fund is now closed²⁸.

²⁵Aztec Management Consultants

²⁶Collins, T., Malone, J. and White, P. (2006). Report of the Independent Salmon Group. Report to the Department of Communication, Marine and Natural Resources.

²⁷[www.fisheriesireland.ie; https://ec.europa.eu/competition/state_aid/cases/219787/219787_899282_4_2.pdf](https://ec.europa.eu/competition/state_aid/cases/219787/219787_899282_4_2.pdf)

²⁸<https://www.fisheriesireland.ie/extranet/eels/1546-eel-fisherpersons-support-scheme-booklet-and-application-form/file.html>

A Way of Life

A loss of heritage, identity and skills is felt with the loss of these fisheries. There is a fear that the trades, skills and craft of inshore fishing may come under threat and the culture, heritage and history of the industry could be lost²⁹. Skills lost include net mending, the role of wind, tide and season, boat building, boat handling and also the loss of traditional fishing methods – drift netting for salmon and herring, fyke nets or baited traps for eels. It is also felt there is a loss of community and camaraderie that came with the salmon fishery in particular³⁰. Exacerbating these issues is the age profile of the industry, the National Strategic Plan for the Fisheries Sector 2007 -2013 estimated that 51% of the workforce was aged over 40 years.



Opportunities

- **Explore the Establishment of a Heritage Fishery**

In consultation with stakeholders, there have been suggestions of heritage fisheries as a means to maintain the traditional fishing methods. Internationally, coastal places with strong fishing traditions have been diversifying to Pesca tourism (fishing tourism). The concept is not clearly defined due to differing management and regulatory measures by country. The proposal for a Waterford Estuary heritage fishery should be explored further. It would need to include consultation with the relevant management bodies such as Inland Fisheries Ireland.

- **Bass Fishing Ghillies**

Bass is a fish highly prized by all sea anglers. Estuaries, mudflats, steep to shingle beaches, sandy surf beaches, rocky shores and headlands are all areas where bass can be found. There are reported increases in bass in Waterford Estuary in recent years. There are a number of boat accessible locations for targeting bass in the area. Explore the feasibility of establishing a ghillie/guide fishery with Inland Fisheries Ireland and other relevant bodies. The ghillie would have extensive knowledge of the estuary and best fishing spots.

- **Sharing of Skills and Knowledge**

There is a fear that the skills and craft of the estuary fisheries may come under threat and the culture, heritage and history may be lost. Develop workshops where the skills and knowledge associated with fishing can be passed on to younger generations. This would include tides, weather and net mending. Boat handling skills would link with building traditional vessels. Compensation should be provided to fishermen for the provision of training.

- **Scientific Research and Monitoring**

Fishermen's practical knowledge of the sea and of the characteristics and behaviour of different marine species can be invaluable when it comes to the collection of scientific data. IFI set up a Scientific Eel Fishery in which fishermen's local expertise and historical knowledge around eels in their area played an important role in the project. It is increasingly recognised that the sustainable management of fisheries resources can only be achieved with better cooperation, data sharing and mutual understanding between scientists and fishermen. This also links with the opportunities identified in the previous section.

²⁹Irish Inshore Fisheries Sector Strategy 2019-2023, Inshore Fisheries Forum (2019)

³⁰Doherty, A. (2020). Waterford Harbour Tides and Tales. The History Press.

3.2.2 Traditional Boats

Changing patterns in fishing has led to a decline in the use of indigenous boats and official policy in relation to traditional fishing methods has led to the disappearance of many of the smaller types³¹. Drift and draft netting of salmon, on which many of the boatmen have traditionally depended, has been suspended since 2007 raising doubts about the future of the small fishing boats in the estuary³². Several indigenous boats types have thus far survived in the Waterford Estuary. Traditional boats include the 'prong', heavier caravel built estuarine punts and the 'Ballyhack' yawl.

Prongs, punts and yawls were a hallmark of Waterford Estuary. They have died out as the uses, and the men who used them, have. They were culturally significant, if not unique and to lose them from the water is to my mind a heritage loss

- Andrew Doherty, Tides & Tales

These are still in evidence throughout the estuary but are diminishing. Prongs are down to single numbers and traditional sailing Ballyhack Yawls are down to last surviving examples.

Prong: The prong is closely associated with the Cheekpoint area of the estuary. It is a boat shaped like a halved bottle and with a hull akin to a barrel. Like the currach, these keelless craft require experience in handling. The prongs principal advantage is that it can be launched at all states of the tide, the round hull sliding easily across the mud banks of the estuary. The prong can also float in only a few inches of water and can be poled over shoal banks and mud flats as required³³.

Punt: Carvel built punts are the most numerous type of working boat in the Waterford Estuary today. Punts can be found in all of the small harbours of Duncannon, Arthurstown, Ballyhack and Passage, as well as Cheekpoint. Measuring from 16 to 17 feet in length and about 5-foot beam, the punt is essentially a heavy duty rowing boat, fairly standard in design, providing a stable work platform (traditionally for salmon drift netting). Long sweeps and outboards are used for propulsion, but in former times they carried a spritsail. The spritsail was favoured as an auxiliary form of propulsion because its mast was unstayed, and the sail could be rolled up around the mast and spar and stored out of the way when shooting or hauling nets. In some of the older craft, the hole for the mast can still be seen in the forward thwart.

Ballyhack Yawl: A traditional yawl is a two masted sailing boat with a mizen and a main sail. In the 40s, engines were fitted and the traditional ballyhack yawl was a type of fishing boat with the propeller coming out of its quarter to facilitate the fishing of nets (salmon and herrings) in the strong tidal system of the Waterford estuary.

Boat Building

With the demise of traditional vessels, we also see the loss of traditional boat building and skills. Boat building was carried out in most villages, the principal boats made being the punt or the prong in the upper estuary. The mid 1960s to the 1980s Ireland saw a growth of local boat-building skills and small boatyards, including Carrolls' Boatyard in Ballyhack. The craft of timber boat building was developing as an area of skilled employment and considerable potential. Between 1968 and 1981 approximately 30 half-deckers were built in Carrolls', using larch on oak frames in a carvel type design. The timber came from a variety of Irish forests and estates. In 1982, they began to build fully decked vessels, 36-feet long and capable of carrying up to eight tonnes. Demand dried up in the late 1980s and the boatyard stopped building the traditional boat³⁴. A list of the vessels built at Carrolls Boatyard from 1968 – 1986 is provided in Table 5 in the appendices. The business diversified to repair works, overhauls and refitting. From 1992 to the closure of the boatyard in 1997 Carrolls refurbished the Trent class lifeboats from Scotland, England, Wales and Ireland for the RNLI.

Regattas

Regattas were a community wide event hosted by each village over the season as well as in Waterford and New Ross. Participants were from all villages on the estuary. Boat classes included: Wag Race (the oldest one design dinghy in existence); Yawl Race; Punt Sailing; Punt Open (pair-oared) and Punt (confined). Similar regattas are held presently in Galway and all over South Connemara during the summer with the traditional Galway Hookers.

³¹Policy Paper on Conserving Ireland's Maritime Heritage. The Heritage Council (2006)

³²MacCarthaigh, C. (2008). Traditional Boats of Ireland: History, Folklore and Construction. Collins Press.

³³<https://tidesandtales.ie/the-prong-curious-and-unique-boat-of/>

³⁴<https://www.irishtimes.com/news/the-rising-eu-tide-sank-a-lot-of-boats-1.100384>



Opportunities

- **Inventory of Traditional Vessels**

Ireland has a proud tradition in the design, construction and use of boats. The Heritage Council recommend that although there have been successful initiatives in preserving and maintaining certain types of craft, there is much to be gained from wider efforts to highlight and preserve boating traditions. They go on to suggest that it would be beneficial to:

Record surviving traditional/heritage boats, including technical details, using standardised procedures; record the collections and anecdotes of traditional boat builders and users to place boats in their proper social and cultural contexts; preserve examples of heritage boat types afloat and in use and identify others that may need to be conserved; encourage regional and local boat collections; develop and sponsor courses in traditional boat building

This recommendation is very relevant to the boating heritage of Waterford Estuary. A first step would be to carry out an inventory of boats in the estuary. A proposed inventory template is provided in the appendices.

- **Waterford Estuary Traditional Boats Conservation Project**

There is the opportunity for the rebuilding/restoration of a traditional yawl 'The Ramona'. The project is currently being explored. The Ramona is a 28ft yawl built in 1930s and used for salmon drifting and drift netting for herring on Waterford Estuary. This may lead to further boat building and restoration opportunities. A community based boat yard could encourage further restoration and building of traditional boats. The restoration of boats could be done not only for reasons of heritage but also to promote boating in traditional craft and to provide an additional heritage and tourism asset. FLAG has funded the building / restoration of prongs and punts previously.

- **Explore the Feasibility Reinstating Summer Regattas**

Explore the history of the estuary regattas and the feasibility of reinstating a summer regatta within the estuary. This would be linked with maintaining traditional boats and also passing on boating skills to others. Regattas would mean that the restoration of traditional vessels would become part of the estuary's living heritage and culture, not just museum pieces.

Similar regattas currently take place in the West of Ireland with the traditional Galway Hookers. The Galway Hooker is a traditional boat distinctive to Galway Bay and the coast of Connemara. Once a utilitarian boat, used for fishing and to carry many different goods, the Galway Hooker is now a leisure craft. These boats are also used for sailing courses and trips along the coast of Connemara. Summer regattas are held in Galway and all over South Connemara. Cruinniu na mBad annual festival celebrates the Galway Hooker and everything associated with it. Such festivals and regattas are seen as important for the survival of the craftsmanship of traditional boat building, sail making and skills. There is also a Galway Hooker exhibition in the Galway City Museum which tells the story of the boat unique to the west coast of Ireland.

3.2.3 Built and Vernacular Maritime Heritage

There is an abundance of important structural heritage on Waterford Estuary including harbours, piers and slips (some still extensively used), lighthouses, military buildings, castles, monastic sites, Martello towers, coastguard stations, lifeboat stations and many vernacular features which describe a way of life which is now largely gone. This includes, for example fishing weirs and quays.

Both the National Inventory of Architectural Heritage and the Sites and Monuments Records list a number of buildings and structures that are of relevance to the maritime heritage of the area. While these are not all protected structures these records provide planning authorities with information to determine if structures should be added to the Record of Protected Structures (RPS). Table 6 in the appendices lists some of these buildings identified from a search of Historic Environment Viewer³⁵.

The following presents some, by no means all, of the built and vernacular maritime heritage.

Weirs

A fishing weir is an obstruction placed in tidal waters to direct the passage of, or trap fish. Waterford Estuary has a rich tradition in weirs dating back to the arrival of the Normans. A weir at Buttermilk Castle was operated by the Cistercians, the posts of the weir can still be seen at low tide.

The traditional weirs to the estuary are referred to as head weirs. Head weirs were one of the oldest forms of fishing engine used in tidal waters in Ireland³⁶. A head weir is a method of catching fish which uses the tides to bring the fish to the net. The weirs themselves were a V-shaped structure. The mouth of the weir is the widest part of the structure. The wings that made the V shape were constructed from straight poles driven by manpower into the riverbed, and held together with horizontal beams. Both wings came together at the 'head' from where a net was hung, and it trailed away from the weir. The conical net worked similar to a modern-day trawl net³⁷.



In a community mapping exercise carried out in April 2014, 36 weirs from Little Island to Creadan Head were identified and mapped. Of these, there are three V-shaped weirs being fished today³⁸.

Lighthouses

At the mouth of the estuary is Ireland's most iconic lighthouse – Hook Lighthouse. There are another four lighthouses (Dunmore, Duncannon Fort & Duncannon North, and Passage East Spit Light) that have guided vessels along the estuary. Each of these lighthouses has its own unique history.

Hook Lighthouse: Build 800 years ago, by William Marshall, a Knights Templar, to protect and develop the shipping trade, the lighthouse continues to serve its original function and is the world's oldest operational lighthouse. Light keepers and their families lived at the lighthouse until 1977. The lighthouse was converted to electric operation in 1972 and automated in 1996.

Dunmore Lighthouse: Located at the end of the original harbour wall in Dunmore East, this lighthouse guarded over one side of the estuary at the mouth of the harbour, with the other side watched over by Hook Lighthouse. In 1814 Dunmore was chosen by the Post Office to be the Irish terminal of a new mail packet route from Milford Haven. The Post Office engaged Scottish engineer Alexander Nimmo to design and build the new harbour. His design included a lighthouse which took the form of a fluted Doric column with the lantern on top of the capital. The lighthouse became operational in 1825.

³⁵<https://maps.archaeology.ie/HistoricEnvironment/>

³⁶Went, A.E., (1946). Irish Fishing Weirs – I – Notes of Some Ancient Examples Fished in Tidal Waters. The Journal of the Royal Society of Antiquaries of Ireland. Vol 1 (4) 176 - 194

³⁷<https://tidesandtales.ie/the-woodstown-scotch-fishing-weir/>

³⁸McGrath, R. (2015). Waterford Estuary Area: A Community Led Mapping and Audit of its Natural and Heritage Resources

Duncannon Leading Lights: There are two lighthouses in Duncannon, Duncannon Fort Light and Duncannon North lighthouse. Duncannon Fort lighthouse was constructed in 1774. The North Lighthouse was originally built at Roche's Point in 1817. It was too small for that location, dismantled, carried to Duncannon in two small vessels and rebuilt in 1838 forming a rear leading light with Duncannon Fort Light. The north lighthouse and fort lighthouse operate as leading lights. They guide ships up the deep channel in the harbour estuary and help them negotiate the submerged sandbar.

Passage East Spit Light ('Spider Light'): The Spider Light (operational from 1867) is an iconic structure in Waterford Estuary. It is a screw-pile lighthouse that was designed by a blind Belfast engineer called Alexander Mitchell. His design enabled lighthouses to be built in the difficult soil conditions of shifting sands in deep waters. The design made the lighthouses easy to construct, inexpensive and quick to build. The lighthouse design was typically octagonal or hexagonal with one central pile and eight others arranged around it meeting to support the structure above. There are four of these remaining in the country. The Spit Lighthouse in Cork Harbour received a refurbishment some years ago. There is another in Moville on the River Foyle and one in Dundalk Harbour. These are the last remaining Mitchell pile lights in Britain and Ireland. Despite its dilapidated state the Spider Light is an important structure both nationally and to the Estuary community.



Harbours, Piers and Slips

The history of the harbours, piers and slips on the estuary includes mail packet stations, famine relief schemes and lighter stations to unload and lighten ships travelling up the estuary.

The mail packets of the 18th and 19th century were the means by which communications happened at the time. At various stages during this time Passage East, Cheekpoint and then Dunmore East harbours were each used as the Waterford mail packet stations. Alexander Nimmo was engaged to build Dunmore East harbour. Over thirty piers or harbours were built on the Irish coast under the direction of Scottish engineer Alexander Nimmo, many of these in the west of Ireland. The passenger and mail service from Milford to Dunmore operated until 1835 when Waterford became the Irish terminal. Dunmore East is now a National Fishery Harbour Centre.

In the 1820s, the Fishery Commissioners who regulated the sea fisheries decided to build fishery piers and harbours to stimulate and encourage fishing activity. This coincided with the famine, to which the government and others responded by providing money to start public works for the relief of distress - famine relief schemes. The Commissioners made grants from this money, of half the cost of erecting any pier or quay on the condition that the proposed developer, usually the landlord, provided the other half. At that time piers were built on the Dunbrody Estate at Duncannon, Arthurstown and Ballyhack to facilitate trade and encourage tenants to become involved in the fishing industry³⁹.

There are other quays that are no longer in use and possibly unknown to many. One example is 'Tom Poor's Quay' above Ballyhack. Lighters were a shallow draft boat or barge, usually flat bottomed, used in unloading (lightening) or loading ships. The function of the boat was to lighten the load of incoming vessels, allowing them to float over sand and mud bars as they journeyed to New Ross or Waterford. Tom Poo's quay above Ballyhack is also known as Lighterman's Quay. The quay has an old roadway leading away from it back towards Ballyhack. Similar can be found almost directly opposite at Lamberts Cove on the Waterford side⁴⁰.

³⁹Colfer, B. (2004). The Hook Peninsula, County Wexford. Irish Rural Landscapes: Volume II. Cork University Press.

⁴⁰<https://tidesandtales.ie/tag/lighters/>



Forts

Duncannon Fort is a sixteenth century coastal bastioned fort located on a rock outcrop that juts out into Waterford Harbour. Construction of the fort began in 1587. The building of the fort was prompted by rumours of a Spanish invasion. Another consideration was the protection of shipping against pirates and the safety of the fishing fleet⁴¹. It was one of a number of strategically important coastal fortifications in Ireland. Duncannon Fort is associated with some of the most momentous events in Irish history. After the Battle of the Boyne in 1690 King James II embarked from Duncannon for Kinsale and from there fled for France. His opponent, William of Orange, also departed from Duncannon. The fort remained an important British garrison until 1919 when it was handed over to the fledgling Irish Free State. In 1993 it was handed over to Wexford County Council. Many of the remaining buildings date from the 18th and 19th centuries⁴².

Building of a bastioned fort at Passage began at the same time as Duncannon. Passage Fort was under the command of the Governor of Duncannon. It was considered well placed to control the shipping channel. The fort was captured by Cromwell's forces in 1649 and over the next year his army resisted attempts by confederates to recapture it. Despite continued maintenance of the passage fort throughout the 17th century it was abandoned in 1711 and the remains demolished in the late 19th century. A portion of the blockhouse has been preserved and the remains of a subcircular corner tower⁴³.

Cistercians – Dunbrody Abbey and Castles

Dunbrody Abbey is regarded as one of the most impressive Cistercian monuments in Ireland. The abbey is a national monument in state ownership. Ballyhack and Nook were developed as granges on the Dunbrody estate to exploit the economic potential of the estuary. The economic value of the estuary included rental income from fishing weirs as well as rent and fish from fishermen in Ballyhack⁴⁴. Ballyhack Castle was within the Cistercian estate of Dunbrody Abbey. It was built to protect its fishing community and the ferry with Passage East. The ancient ferry crossing still operates today. The tower house is listed as a national monument. Buttermilk Castle, called Skeroirke in the Civil Survey (1654-5) when it was owned by John Etchingham, but it had been part of the possessions of Dunbrody Abbey. It was built to protect the fishing weir of Scarre⁴⁵.

⁴¹Colfer, B. (2004). The Hook Peninsula, County Wexford. Irish Rural Landscapes: Volume II. Cork University Press.

⁴²<https://maps.archaeology.ie/historicenvironment/>

⁴³<https://maps.archaeology.ie/historicenvironment/>

⁴⁴Colfer, B. (2004). The Hook Peninsula, County Wexford. Irish Rural Landscapes: Volume II. Cork University Press.

⁴⁵<https://maps.archaeology.ie/historicenvironment/>

Opportunities

- **Restoration of the Spider Light**

Restore the iconic Spider Light. It would be a complex and challenging project due to its location, extent of conservation works required as well as the health and safety and environmental measures to be met however it would be a worthwhile project. It forms an important part of maritime heritage both nationally and locally. As part of this, an overall campaign could be created to highlight the significance of the Spider Light and other lights in the estuary. Carry out maintenance works on other structures - Duncannon Fort Lighthouse.

- **Interpretation of Built Heritage**

There is a significant amount of built and vernacular heritage on the estuary. Each telling an important story of a contribution to maritime heritage and the area. Many of the buildings are intertwined and connected through history. This should be promoted through interpretation centres, signs and leaflets.

- **Develop a multi-purpose and sustainable facility to interpret the history, culture and heritage of the estuary**

Duncannon Fort was handed over to Wexford County Council in 1993. Buildings within the fort have been used in the past for attractions such as art gallery and maritime museum. The fort offers the ideal location for a maritime centre to showcase the maritime heritage of Waterford estuary. It provides excellent views of the estuary, is a part of the maritime heritage of the area and has a number of buildings that could be used to interpret, showcase and exhibit. This would also be an appropriate reuse of historical buildings.

3.2.4 Maritime Archaeology

Coastal areas contain a wide range of archaeological sites, relating to activities and events particular to each area. These include underwater sites such as shipwrecks and intertidal zones that contain archaeological structures including fish traps of timber or stone, the remains of boats and trackways from prehistoric and later periods.

Shipwrecks

Approximately 200 wrecks have been recorded by the Underwater Archaeological Unit of the Department of Culture, Heritage and the Gaeltacht in Waterford Harbour⁴⁶. Wrecks recorded are dated from 1543 to 1945⁴⁷. Table 2 shows the wide variety of vessel types recorded and demonstrate the longstanding maritime heritage of the estuary. One wreck of note is the 17th century wreck with canon intact uncovered during dredging works being carried out by Port of Waterford in 1999. The remains are considered to be those of the Great Lewis, the flagship of the Cromwellian fleet. The area is now a protected site.

Vessel Type	Count	Vessel Type	Count
Barge	3	Sailing Boat	1
Barque	10	Sailing Ship	2
Boat	6	Schooner	29
Brig	10	Ship	5
Brigantine	4	Sloop	6
Dredger	1	Smack	3
Dutch Galliot	1	Snow	1
Fishing boat	3	Steamship	4
Full-rigged ship	1	Submarine	1
Hooker Hooker	2	Trawler	1
Ketch	2	Unknown	94
Lifeboat	1	Vessel	5
Lighter	5	Yacht	1
Longboat	2	Yawl	3
Mine-sweeper	1	Grand Total	209
Motor Boat	1		

Table 2: Summary of vessel types identified using the National Monuments Service Wreck Viewer for Waterford Estuary. The variety of vessel types provide evidence of the maritime history of the estuary. Source: <https://www.archaeology.ie/underwater-archaeology/wreck-viewer>

⁴⁶A search was carried out on the Wreck Viewer, narrowing wrecks to within the estuary area and searching by area.

⁴⁷<https://www.archaeology.ie/underwater-archaeology/wreck-viewer>

Promontory Forts

Coastal promontory forts were easily seen and gave oversight of the sea. They are generally assigned to the Iron Age. There are a number of promontory forts on the estuary including sites at Nook, Booley, Broomhill and Dunmore. The placename and location of Duncannon would suggest it originated as a promontory fort. The siting of these forts emphasises the importance and function of the estuary as a trading centre.

Viking Settlement

The first Viking settlement in the Waterford area was at Woodstown. The site dating to about 840 was discovered by archaeologists in 2003⁴⁸. Finds from the site included silver, amber, ships nails, weights and weaponry. Their mastery of seafaring gave Vikings a strategic advantage commercially and militarily. The site at Woodstown was ideally suited for a settlement that relied on waterborne activity as it had direct access to the river. The network of the Three Sisters Rivers provided ready access to inland areas. While from Waterford Harbour Vikings could sail easily to western Britain or adjacent parts of the continent⁴⁹.

Findings of artefacts at Creadan Head, including flint tools, suggest early settlements stretching back to the Mesolithic Period (Middle Stone Age). There is evidence of smuggling trade is indicated by the presence of rock-cut steps also at Creadan Head. The stretch of road leading to it is known as 'Bothar na Mna Gorm'.

Opportunities

- **Interpretation of Maritime Archaeology**

Develop educational material about maritime archaeological heritage, its value, protective measures and the history and stories associated. For example, the variety of vessel types recorded in the NMS wreck viewer give insight to the maritime significance of the estuary and also the change in vessels over time. Present this information in an interpretive centre, website, interpretive boards or posters. Create awareness of the importance of maritime archaeological heritage. The variety of vessel types identified by the NMS wreck viewer provide evidence of the maritime heritage of the estuary.

- **Protection of Maritime Archaeology**

Conserve and protect maritime archaeological monuments. These sites provide evidence of previous generations, their lifestyles and development of society. Archaeological sites are vulnerable to pressures such as development and coastal erosion as a result of climate change.

⁴⁸<http://www.waterfordtreasures.com/news/the-woodstown-viking-sword>

⁴⁹<http://irisharchaeology.ie/2015/04/woodstown-a-key-site-for-understanding-vikings-in-9th-century-ireland/>

3.2.5 Maritime Transport and Trade

Shipping is one of our oldest industries and still plays an important role in our modern society. The marine access to both Port of Waterford and Port of New Ross is via Waterford Estuary. The importance of Waterford Estuary as a trade route dates back to the Iron Age with evidence of promontory forts and later the Vikings. Later the estuary was used extensively by the Vikings. During the medieval period, the foundation of key ports of Waterford and New Ross on its tributary rivers made the protection of the harbour a priority⁵⁰.

Today, Port of Waterford is one of five ports of National Significance (Tier 2) within the terms of the National Ports Policy 2013. New Ross Port Company is a designated Port of Regional Significance under the National Ports Policy and was transferred to Wexford County Council in 2019. The National Ports Policy identifies categorisation of the ports sector into Ports of National Significance (Tier 1), Ports of National Significance (Tier 2) and Ports of Regional Significance.

Seafaring and shipping have been an important part of the heritage. People from the estuary departed to join ships and sailed to ports around the world. In the 18th and 19th centuries seafaring expertise allowed many to cross the Atlantic to the Newfoundland fishery⁵¹. The records of the Registrar General of Shipping and Seamen, 1860 – 1921 consist of ship agreements and crew lists. A search of this shows that many people from the estuary served time at sea on vessels including the S.S. Dunbrody, a replica of which is now a museum in New Ross. These included emigrant ships, cargo ships and also a river service running from Waterford – New Ross and Waterford – Duncannon.

Bell Lines Shipping Company was a Waterford based company operating from the 1960s to 1997. Many locals went to sea with Bell Lines shipping company following on a tradition of seagoing from the local fishing harbours when fishing was slack. Three of the five pilots for Port of Waterford served with Bell Lines. Today, there is reported increasing difficulty finding people in local areas with the right level of experience or skills in the maritime transport sector⁵².



⁵⁰Colfer, B. (2004). The Hook Peninsula, County Wexford. Irish Rural Landscapes: Volume II. Cork University Press

⁵¹Colfer, B. (2004). The Hook Peninsula, County Wexford. Irish Rural Landscapes: Volume II. Cork University Press

⁵²https://www.imdo.ie/home/sites/default/files/IMDOFiles/IMDOStoryImages/Publications/Future_Skills_Requirements%20_EconomyPublication.pdf

Pilots for Port of Waterford and New Ross Port embark from Dunmore East, Passage East and Ballyhack. Prior to the formation of Waterford Harbour Board in 1816, hobblers competed to guide ships up the estuary. Hobbling is described in the Oxford Dictionary as ‘unlicensed pilotage’. Hobblers were hardy individuals prepared to endure considerable hardship to secure employment. Traditionally, the work went to the men in the first boat to reach an arriving ship at the mouth of the harbour⁵³. In 1816 piloting became more organised and pilot boats were employed to put recognised pilots aboard ships⁵⁴. Port of Waterford has recently invested in a new pilot boat to be named ‘Port Lairge’, a name long associated with a steam powered dredger that served Waterford until the 1980s. The new boat is due to come into use in 2021.

The largest surviving collection of harbour records in the country dating from its inception in 1816, including a complete set of Board minutes, is from Waterford Harbour Commissioners. Pilot station returns books exist in an almost unbroken run from 1817 concerning returns filled in at the stations of Passage and Dunmore. Maps, plans and drawings survive from early 19th century and a large quantity of operational records relating to the engineer’s department relating primarily to harbour engineer William Friel’s career from 1890s to his retirement in the 1960s⁵⁵.

Passage East Ferry

The Passage East car ferry connects both sides of the estuary from Ballyhack to Passage, the narrowest point of the estuary. It is an ancient ferry crossing. Various forms of boat have been used to transport horses, carriages, as well as pedestrians and cyclists. When the Knights Templar arrived in 1200 they were granted the ferry rights⁵⁶. The latin for ‘crossing over’ is passagium, hence the name Passage.

Opportunities

- **Interpretation of Maritime Transport**

Waterford Estuary was important through the centuries for trade and shipping. It provided access by boat to many of the principal towns in the South East because of its river system. The heritage of shipping, trade and transport on Waterford Estuary is vast and warrants further research. It covers topics of employment, emigration, trade, fishing the Grand Banks, evolution of shipping and services to shipping. This maritime heritage should be documented and interpreted through exhibitions, leaflets or information boards.

- **Student Bursaries**

Establish a scholarship programme to encourage young people from the community towards a maritime career.

- **Promote Boating and Skills Among Young People**

There is a reported lack of awareness among school leavers about career options in the maritime sector but also a lack of basic maritime knowledge and experience. Organise events to teach young people basic maritime skills – including boating, knots, weather and map reading.

- **Display the History of the Ferry**

The ferry is a local asset connecting both sides of the estuary. Create awareness of the history and evolution of the ferry crossing including Knights Templars, Cistercians, Patsy Barron ferryboat for pedestrians and cyclists (1940s) to the car ferry today using information boards and website.

⁵³Colfer, B. (2004). The Hook Peninsula, County Wexford. Irish Rural Landscapes: Volume II. Cork University Press

⁵⁴<https://russianside.blogspot.com/2018/07/harbour-hobblers.html>

⁵⁵<https://www.nationalarchives.ie/article/sources-maritime-history/>

⁵⁶<http://gaultierhistoricalsociety.blogspot.com/2014/09/historical-walk.html>

3.2.6 Recreation and Tourism Amenities

The estuary provides a natural public amenity; natural assets enjoyed by local communities and visitors include an attractive coastline and stunning coastal walks and beautiful beaches. Waterford Estuary hosts a range of water-based leisure activities including sea angling from boat and shore, boat tours, swimming, sailing, kayaking, kite surfing and leisure boating. Water-based activities are increasing in popularity.

For sailing and boating not only can boats visit from the coast (Kilmore quay to the east and Dungarvan to the west), the estuary is the gateway to the Barrow, Nore and Suir rivers. It is ideally located for overseas sailing visitors particularly those visiting from Britain and France. The Marine Institute⁵⁷ recommended the development of a ‘mini cruising ground’ which would allow boat owners to stop off at various points of interest throughout the estuary. The Irish Marine Federation recommended a ‘necklace of marinas’ for Waterford Estuary.

Waterford Harbour Sailing Club (WHSC) is located in Dunmore East. They have visitor moorings. Waterford Harbour also has a 60 metre pontoon in Dunmore. There are pontoon facilities in New Ross and Waterford city. Cheekpoint Boat Owners Association (CBOA) was established in 2018 with the goal to secure funding, community support and permission for a pontoon facility at Cheekpoint. The association recently received planning permission for a pontoon.

The area offers excellent angling opportunities from sea and shore. Charter boats suitable for sea angling and boat trips operate from the estuary (Ballyhack) and Dunmore East. Sea angling is best around Hook Lighthouse. The sheltered waters of the estuary allow anglers to fish in less favourable weather. Boat trips offer ample opportunities to view the natural and historical heritage from the water. There is constant demand for excursions including family boat trips, eco tours, photography, and cultural heritage tours and diving in the area but development hampered by lack of suitable boarding facilities.

There are numerous scenic walks on both sides of the estuary both on and off road. Some of these are documented in a report undertaken for the Waterford Estuary Communities Network. Waymarked walking trails are in place in some parts of the estuary but many of the walks in the area are not. Additional walking routes are being developed, for example Wexford County Council are officially launching a walk from Duncannon to Arthurstown in 2021.

A small selection of walks on the estuary include:

- Dunmore East Cliff Walk
- Faithlegg Wood or ‘the Minaun’
- Arthurstown to Duncannon
- Passage to Cheekpoint
- Passage Strand to Woodstown Strand (when the tide is out)



⁵⁷Marine Institute: Options for Marine Leisure Development in the Waterford Estuary, 2001.

Safety at Sea

There is a strong tidal system in the estuary and in promoting any marine activities this must be taken into account. Encourage those that take to the water to take maritime safety seriously and always think about safety issues. Rescue services in the area include the RNLI, Waterford Marine Search and Rescue and the Irish Coast Guard. The RNLI has been stationed on the estuary since 1869⁵⁸. There are two lifeboat stations, Dunmore East operates an all-weather Trent class lifeboat and Fethard operates a D-class lifeboat which is launched from multiple sites on the Hook Peninsula.

Opportunities:

Promote Sustainable Marine Tourism & Leisure

Promote a strong outdoor, marine and wildlife based tourism through sustainable marine tourism and leisure. Sustainable marine tourism is about establishing and maintaining a symbiotic relationship between tourism and the natural marine environment. These may be water based, land based or both. Examples of activities include whale and dolphin watching, bird ornithology, boat trips, rock-pooling, coastal footpaths and beach walking. Further discussion to some of these is given below.

- **Infrastructure**

Opportunities exist for sustainable marine leisure and tourism development on the estuary. Recreation and tourism amenities are all dependent on appropriate infrastructure. Despite often being recognised as an area of potential excellence in marine tourism, the lack of appropriate infrastructure has been identified as the obstacle to development. For water based activities this includes the availability of pontoons, floating moorings and gangways. Establish ways in which public resources such as harbours, piers and slips could be shared with private enterprises for both marine tourism and leisure. For land and water based activities suitable infrastructure such as trails, maps and signage would develop walks, cycle ways, kayak trails and angling. Any development of infrastructure should be done in a sustainable manner that is mindful of SACs and the natural heritage of the area.

- **Walking Routes**

Identify walking routes along the estuary. Promote existing and proposed walks and develop walking tourism - Waterford Estuary walking trails. Explore the feasibility of creating unique routes / trails that can be linked by the car ferry or a local water taxi to bring people to routes that may be only accessible by water. Unique routes may be identified through mapping of the estuary. Cheekpoint and Faithlegg Development Group have carried out work on mapping and interpreting walks in the area.

- **Blue Way**

Develop a Waterford Estuary Blue Way to encourage use and enjoyment of the estuary in a sustainable manner. Creating a guide including a map with access points to the water, coastal paths, hazards and significant landmarks along the estuary would be of use to many. This could include kayak trails, coastal paths and cycle routes.

- **Promote the Importance of Safety at Sea**

Ensure that all activities are enjoyed with an awareness of safety. There is a strong tidal system in the estuary, this must be taken into account in the development of any marine leisure activity. Local knowledge can help inform on this aspect. Promote the importance of safety at sea including weather conditions and forecasts, tides, wearing personal floatation devices, logging journey information, using emergency beacons, and maintaining emergency contacts. This can be achieved through leaflets, information boards and training events.

⁵⁸A lifeboat station was first established in Duncannon in 1869. Dunmore East lifeboat was formed in 1884 and Fethard in 1886. Duncannon station was closed in 1886 following the establishment of Fethard and Dunmore stations.

3.2.7 Intangible Cultural Heritage

Intertwined in every aspect of maritime heritage is the intangible cultural heritage of the estuary. Intangible heritage includes folklore, customs, beliefs, traditions, knowledge and language. Until very recently, every aspect of maritime knowledge and skills was transmitted aurally, orally and by imitation. Across the wide range of human activities, from the naming of places and physical features, and the flora and fauna within them, to boat building and fishing lore, to customs and beliefs, stories, songs and music, people's lives by the sea were guided and informed by tradition⁵⁹. The wealth of knowledge and skills transmitted from one generation to the next is an important part of heritage. Many aspects of maritime heritage already identified are to some extent dependent on intangible heritage.

The dependence of maritime activities on climate has given those involved in fishing and other activities a keen weather sense, with an ability to predict changes by interpreting signs in the sea and sky. Generations of accumulated knowledge give fishermen an intimate knowledge of the sea, as the currents, shoals and areas of turbulence were relevant not only to fish catches but also their own safety⁶⁰. Place names have been developed from the services provided to shipping or as locations of significance to fishing and seafaring⁶¹. Traditional boat building skills are not recorded in a manual but the skills are passed from generation to generation.

Language, phrases and expressions are all part of this heritage. Neither ye nor the wind that comes from your county is any good ... (easterly wind) – Passage fishermen would shout to the Ballyhack fishermen. The well-known phrase By Hook or By Crook is long associated with Waterford Estuary claiming that Oliver Cromwell in the 17th century vowed to take Waterford by Hook or by Crooke.

There are also superstitions associated with sailing and fishing such as no whistling on a boat because you'd be whistling for the wind. The presence of a woman on board a boat or meeting a red headed woman before boarding a vessel was considered bad luck. While these superstitions may have historically led to boats being predominantly male, women played an important role in the maritime heritage of Waterford Estuary including making nets and oilskins, mending nets, picking cockles, processing and selling fish.

Oral history encompasses stories and memories passed from generation to generation. It is transient and these memories and traditions need to be preserved for this and future generations. The work by Andrew Doherty both with his blog and published books does an excellent job at recording and preserving the history of the estuary and in particular Cheekpoint⁶².

⁵⁹<https://www.coastalheritage.ie/>

⁶⁰Colfer, B. (2004). The Hook Peninsula, County Wexford. Irish Rural Landscapes: Volume II. Cork University Press.

⁶¹For example Hobbler's Rock near Creadan Head

⁶²www.tidesandtales.ie; Waterford Harbour Tides and Tales. The History Press, 2020; Before the Tide Went Out, 2017

Opportunities

- **Record and Document Intangible Heritage**

Encourage the recording and documentation of the intangible maritime heritage of Waterford Estuary including customs, beliefs, knowledge, folklore, language, phrases, traditions and skills. Identify oral, photographic and written historical sources before they are lost forever. This encompasses all elements of maritime heritage.

- **Build a Database of Digital Images**

Collate and create a database of digital images to preserve but also show case maritime heritage and a way of life. There are many sources of images including local photographers, newspapers, the Breslin Archive and the Poole Photographic Collection. Organise an exhibition of images presenting the maritime heritage of Waterford Estuary.

- **Mapping of the Estuary**

Knowledge of the estuary - its physical feature, hazards, place names and fishing lore are very much a part of our intangible cultural heritage. This knowledge is associated with both natural and cultural heritage. Names have been developed from the function they served such as a location for hobbler, lighters quays, the naming of bays and prominent landmarks to inform navigation. There is a danger of these being lost. Carry out a detailed mapping of the estuary including place names, underwater features such as hazards to fishing gear and fishing lore to document and preserve this information.

- **The Role of Women to the Local Maritime Community**

It is evident that women played an important role in the fishing heritage of the area. However this is not well documented. Record the tradition and roles of women in the fishing industry and the local maritime community.

4. Opportunities and Implementation

Waterford Estuary presents a range of opportunities through its rich maritime heritage of seascapes, biodiversity, cultural, archaeological, geological and historic features. Table 3 presents a summary of the opportunities identified.

	Category	Opportunity
Natural Heritage	Seascapes	Mapping of place names
	Biodiversity	Promote and educate Maintain and protect Management, monitoring and maintenance Blue Flag, Green Coasts Harness Fishers Knowledge
	Traditional Fisheries	Explore the establishment of a heritage fishery Pilot the development of bass fishing ghillies Sharing of skills and knowledge Scientific research and monitoring
Cultural Heritage	Traditional Boats	Inventory of traditional vessels Restoration project – community boatyard Explore the feasibility of reinstating summer regattas
	Built and Vernacular	Renovation of Spider Light Interpretation and mapping of built heritage Encourage sustainable re-use of historic buildings Maintain and protect built and vernacular heritage
	Maritime Archaeology	Interpretation of maritime archaeology Protect maritime archaeology
	Maritime Transport	Interpretation of maritime transport and trade Student bursaries Promote boating and maritime skills and knowledge Highlight the history of the ferry service
	Recreation and Tourism Amenities	Promote a sustainable outdoor, marine and wildlife based tourism Marine Leisure Infrastructure Develop Waterford Estuary Blueway Develop a network of walking trails Safety at Sea
	Intangible Cultural Heritage	Record and document intangible heritage Build a database of digital images Mapping of place names Document the role of women to the maritime community

Table 3: A summary of opportunities identified per category.

4.1 Overarching Opportunities

While heritage features can be classified into separate categories, maritime heritage is very much intertwined. Intangible cultural heritage weaves through every component of the maritime heritage. A healthy marine environment supports a diverse range of sea life, supports our cultural and social well-being and supports our economy. Reviewing the opportunities collectively three further opportunities arise:

- A maritime heritage centre as a hub to interpret maritime heritage
- A community boatyard and clubhouse to maintain, protect and promote boat building and seamanship
- Marine leisure infrastructure to encourage sustainable use of the estuary both on and off the water. This has been discussed in the previous section.

Both the maritime heritage centre and community boatyard are discussed further below.

4.1.1 Maritime Heritage Centre

There is a clear opportunity and need to develop a multi-purpose and sustainable facility to interpret the history, culture and heritage of the estuary. Duncannon fort previously had a maritime museum on site and may provide the ideal base for a maritime centre. It provides excellent views of the estuary, is part of the maritime heritage both as a fort and has a lighthouse on site. There are a number of buildings that could be used to interpret, display and exhibit maritime heritage. It could include interpretive rooms on the natural heritage of the estuary and a base to educate on estuarine ecosystems, followed by exploration of rockpools. It can be used for exhibitions and displays on the many aspects of maritime heritage of the estuary and also act as a hub for community projects such as the mapping of the estuary and documenting maritime heritage. Opportunities covered would include, among others:

- Promote and educate on natural and cultural maritime heritage
- Preserve and protect maritime heritage for future generations
- Sharing of skills and knowledge
- Record and document intangible heritage

4.1.2 Community Boatyard and Clubhouse

There is a strong history of boat building, traditional vessels, fishing and seamanship on the estuary. Many of the traditional boats remaining are in disrepair. Skills and knowledge are being lost with each passing generation. The establishment of a community boatyard and clubhouse on the estuary could revive the building of traditional boats, promote a sense of community and create a living heritage. A multipurpose facility would house activities including boat building, sharing of maritime skills and knowledge and boat handling. It would preserve and disseminate old craftsmanship, building traditions and skills. The preservation and building of traditional boats could also result in the revival of regattas and may also inspire some of the next generation to pursue a career at sea. Opportunities covered would include, among others:

- Preservation of skills and knowledge
- Restoration of traditional boats
- Revival of estuary regattas – a community wide event and creation of living heritage emanating from the restoration and building of traditional boats
- Inventory of traditional vessels
- Promote awareness and sustainable use of the sea

Case Study: Meitheal Mara Teo

Founded in 1993, Meitheal Mara is a community boatyard and maritime heritage organisation in the heart of Cork City, a registered charity and training centre. Members build traditional boats, learn how to sail and row these boats, take part in maritime races and events and document Ireland's maritime heritage. Meitheal Mara operates in five areas:

- Community Work and Training
- Boatbuilding and Woodwork
- Seamanship – sailing and rowing
- Events – on land and water

The mission of Meitheal Mara is to integrate and expand personal and community development opportunities through the medium of traditional boat building, maritime recreation and maritime heritage.

Meitheal Mara now have a vision to expand the organisation and provide additional supporting facilities for other maritime groups through the development of a maritime innovation hub which will include meeting rooms, exhibition spaces, boat building and repair, craft training, and storage for boats and equipment.

Learning from Meitheal Mara, Waterford Estuary Community, could develop a similar organisation where skills can be passed on and shared and the maritime heritage of the area be promoted.

For further information see: <https://meithealmara.ie/>

4.2 Interaction, Co-operation and Collaboration

For any project to be implemented successfully, good information and management is crucial. As the estuary is made up of villages in counties Wexford and Waterford, a joint approach to development, promotion and sourcing funding should be taken between stakeholders. County boundaries should not inhibit development. Economic, social and environmental aspects must be considered to support sustainable development and the coexistence of relevant uses and activities promoted⁶³.

Interaction and consultation is required with the appropriate stakeholders; government bodies, local communities, local development organisations and other stakeholders. It is also worth emphasising the need for an estuary representative structure to develop plans, apply for funding and liaise with relevant agencies and organisations.

Lacking at present is an estuary representative structure that can act as an interface between the estuary community and local development bodies and national structures. Currently, the village communities on the estuary operate independently of each other. The concept of competition among villages (or within villages) can be detrimental to all. To develop the maritime heritage an estuary representative group can raise the profile of the estuary and allow communities to develop common themes by working together.

Hook Rural Tourism Ltd is a community organisation on the Hook Peninsula, Co. Wexford. It works to promote the Hook Peninsula and to protect its unspoiled coastal landscape and built heritage. Included in the area covered is Waterford Estuary, Wexford side. If a similar organisation operated on the Waterford side, both could join forces in the promotion and development of the maritime heritage of Waterford Estuary.

Developmental bodies and local authorities should liaise, co-operate and co-ordinate in their plans for the estuary area to ensure consistency with regard to marine and maritime heritage. This is also recommended by the Southern Assembly in their Regional Planning Guidelines for the South-East Region 2010-2022. Local authorities in Wexford and Waterford (and Wicklow) are collaborating with rural development companies to formulate a funding proposal under the Leader cooperation programme for the development of a maritime and estuarine greenway which will stretch from Bray to Ardmore⁶⁴.

⁶³Objectives set out in the EU Marine Spatial Planning Directive. Ireland's National Marine Planning Framework was approved by Government in March 2021.

⁶⁴https://www.waterfordcouncil.ie/media/plans_strategies/tourism/WATERFORD%20Tourism%20Statement%20of%20Strategy.pdf
https://www.wexfordcoco.ie/sites/default/files/content/Planning/ArchivePlans/DraftWexfordCoDevPLan13-19/Volume1_DraftWexfordCountyDevelopmentPlan.pdf
https://www.southernassembly.ie/uploads/general-files/http---www.southernassembly_.ie-docs-SE_RPG_10-22_.pdf

4.2.1 Funding Opportunities

Funding is available through a number of sources including:

Fisheries Local Area Action Groups (FLAG) is a coastal community development strategy. FLAG Southeast has funded a number of projects in the estuary area including restoration of traditional boats, information boards, marine litter pilot project and a book on walks. These are all projects that can be built on. Further calls for FLAG funding will be announced in 2021.

LEADER Funding aims to provide rural communities, small enterprises and social enterprises with grant aid. Funding will be available from April 2021 to support community projects under the new transitional programme. Leader funding is administered at county level by Waterford Leader Partnership and Wexford Local Development. Inter-territorial funding is also possible.

The Historic Structures Fund is government funding through the Department of Housing, Local Government and Heritage. This funding may be relevant to fund projects such as the Spider Light restoration. Funding is applied for through local authorities.

Community Monuments Fund provides investment in Ireland's archaeological heritage. Part of this funding is prioritised for local authorities, private owners and custodians and community groups for the care, conservation, maintenance, protection and promotion of archaeological monuments. The 2021 deadline is April 30th.

Heritage Council Community Heritage Scheme is to support community groups and organisations to undertake projects that will gather information, help to appropriately manage and promote an awareness and appreciation of our heritage. The Heritage Council also organise the annual Heritage Week. This would provide the estuary community the opportunity to showcase their maritime heritage.



Appendices

A1 Description of Waterford Estuary Villages

Dunmore East

Dunmore is a busy and picturesque fishing village at the western entrance to Waterford Harbour. Dunmore is the largest settlement on the estuary and is also one of six national fishery harbour centres (FHC). It has two designated blue flag beaches, striking red sandstone cliffs which host a colony of kittiwakes, and coves such as Badgers Cove and Ladies Cove. A promontory fort was established in the Iron Age overlooking the sea where the old pilot station now stands gives Dun Mor its name. The harbour was designed by Nimmo, built in Bretton style to serve as a packet station for mails between England and the south of Ireland.

Duncannon

Duncannon is situated within the Hook Peninsula region on the Wexford side of Waterford Estuary. The development of the village and that of its character has been influenced by the fort that is located to the west of the village, the long golden strand and also by the quays that service the local fishing fleet. Built in 1586, Duncannon Fort is a coastal bastioned fort located on a rock outcrop that juts out into Waterford Harbour. It has been of strategic importance throughout the centuries. Duncannon has a unique character due to its historic buildings, distinctive landmark structures, prominent headlands and coastal location. Maritime landmarks include: Duncannon Strand, Duncannon Fort, quays, the North Lighthouse and two Martello towers⁶⁵. Near Duncannon are pretty bays including Booley Bay and Dollar Bay.

Arthurstown

Arthurstown was built as an estate village on the Dunbrody estate by Arthur Chichester at King's Bay on the shore of Waterford Estuary in the early nineteenth century. The pier was built in 1829 which provided extra revenue for the estate as tolls were levied on all transactions, particularly coal and culm imported from Wales. A coastal path has recently been developed from Arthurstown to the North Lighthouse Duncannon giving elevated views of the estuary.

Passage East

Passage is a picturesque fishing village built beneath a high escarpment and based around two open squares and three main quays; Boathouse Quay, Hackett's Quay and Middle Quay. There are coastal walks north and south with views over the estuary. A year after Strongbow had landed at Bannow Bay, he landed at Passage East on 23rd August 1170. King Henry II followed him in 1171. Passage was also a fort and considered by Cromwell to be as formidable as Duncannon. There is a long history of the ferry service operating here from Waterford to Wexford.

Ballyhack

Ballyhack is a small village on the Wexford side of the estuary. The village contains a 15th century Norman castle or tower house, which belonged to the Knights Hospitallers and was built around 1480. It is the home of Carroll's boatyard and the Wexford side of the ferry service connecting both sides of the estuary. The road from Ballyhack to Arthurstown gives extensive and beautiful views of the estuary.

Cheekpoint

Cheekpoint village is situated on the southern shore of the Suir estuary and the confluence of the Rivers Nore and Barrow. The presence of two quays point to its historical importance as a fishing village and harbour. In the late 18th century Cheekpoint was a thriving town and the station at which the mail packets from England for Waterford stopped. Many of the industries in the town stopped with the transfer of the mail packet station to Dunmore East. Fishermen from Cheekpoint used two types of boat on the river, the punt and the prong. The prong is a timber boat similar to the widely known currach on the west coast⁶⁶.

⁶⁵Duncannon Local Area Plan, Wexford County Council (2004)

⁶⁶Historic Waterford – the Coast, Waterford County Council.

A2 Proposed Template for Inventory of Boats

Ireland has a proud tradition in the design, construction and use of boats. The Heritage Council recommend that although there have been successful initiatives in preserving and maintaining certain types of craft⁶⁷, there is much to be gained from wider efforts to highlight and preserve boating traditions. They go on to suggest that it would be beneficial to:

Record surviving traditional/heritage boats, including technical details, using standardised procedures; record the collections and anecdotes of traditional boat builders and users to place boats in their proper social and cultural contexts; preserve examples of heritage boat types afloat and in use and identify others that may need to be conserved; encourage regional and local boat collections; develop and sponsor courses in traditional boat building

This recommendation is very relevant to the boating heritage of Waterford Estuary. A first step would be to carry out an inventory of boats in the estuary.

Harbour	Punt	Prong	Ballyhack Yawl	Sailing Punt	Water Wag
Duncannon					
Arthurstown					
Ballyhack					
Passage					
Cheekpoint					
Dunmore					

Table 4: Proposed table for brief inventory of traditional boats in Waterford Estuary

⁶⁷There have been some projects carried out on the rebuilding/restoring of prongs in conjunction with Waterford Area Partnership and FLAG funding.

A3 Vessels Built at Carrolls Boatyard

List Of Vessels Built At Carrolls Ballyhack Boatyard Ltd.		
Vessel Name:	Home Port.	Year Of Construction
Star Of The Sea.	Duncannon, Co Wexford.	August 1968
Lady Josephine	Cheekpoint, Co. Waterford.	March 1969
Nicola	Ballyhack, Co Wexford	December 1969
Kings Bay	Arthurstown, Co Wexford.	February 1970
Naomh Canec	Carrig-On-Bannow, Co Wexford	May 1970
Marie Theresa	Passage East, Co Waterford.	October 1970
Francisco	Duncannon, Co Wexford.	January 1971
Baginbun	Fethard-On-Sea, Co Wexford	April 1971
Porters Gate	Slade, Co. Wexford.	June 1971
Julie Edge	Duncannon, Co. Wexford	November 1971
Aurora	Fethard-On-Sea, Co. Wexford	March 1972
An Tra Mhor	Tramore, Co. Waterford	June 1972
Quay Star	Fethard-On-Sea, Co. Wexford	August 1972
Margaret Noelle	Passage East, Co. Waterford	May 1973
Riverdale	Duncannon, Co. Wexford.	August 1973
Boys Pride	Passage East, Co. Waterford	January 1974
Churchtown Pride	Slade, Co. Wexford.	April 1974
Bonaventure	Glengarriff, Co. Cork	August 1974
Harbour Pride	Passage East, Co. Waterford.	February 1975
Fiona Yvonne	Lisduggan, Waterford.	April 1975
Rinn Liath	Garnish, Bantry, Co. Cork	August 1975
Slaney Star	Ardcavan, Wexford.	October 1975
Shevara	Eyeries, Bantry, Co. Cork	May 1976
Parnell	Ballyhack, Co. Wexford.	July 1976
Colleen 2	Cheekpoint, Co. Waterford.	November 1976
Spring Flower	Bantry, Co. Cork	April 1977
Hilary Susan	Dunmore East, Co Waterford	July 1977
Ruby Tuesday	Duncannon, Co. Wexford.	December 1977
Boy Alan	Cheekpoint, Co. Waterford.	February 1978
Jane Ann	Passage East, Co Waterford.	July 1978
An Finin	Ring, Dungarvan, Waterford.	January 1979
Eleanor Rose	Cheekpoint, Co Waterford	July 1979
Tudor Lady	Dungarvan, Co. Waterford	January 1980
Wendy Christine	Duncannon, Co. Waterford.	July 1980
Fearless 2	Ballyhack, Co. Wexford.	February 1981
Jacqueline Ann	Duncannon, Co. Wexford.	July 1981
Anita Marie	Ballyhack, Co. Wexford.	April 1982
Madona Marie	Aranmore Island, Co. Donegal.	June 1983
Ellen Marian	Ring, Dungarvan, Waterford.	December 1986

Table 5: Vessels built at Carrolls Boatyard 1968 - 1986. Source: Josephine Carroll

A4 List of Maritime Related Buildings from NIAH and SMR

List of Buildings by Village National Inventory of Architectural Heritage & Sites and Monuments Records			
Village/Townland	Details	Year	Source
Barrow	Barrow Bridge	1900-1910	NIAH
Cheekpoint	Pier / Jetty	1880-1890	NIAH
Nook	Promontory Fort		SMR
Nook	Salmon Weir	1541	SMR
Ballyhack	Castle - Tower House	1541	SMR
Passage East	Pier / Jetty (Hackett's)	1800-1820	NIAH
Passage East	Passage East Pilot Station	1840-1860	NIAH
Passage East	Pier / Jetty (Middle)	1800-1820	NIAH
Passage East	Pier / Jetty (Boathouse)	1800-1820	NIAH
Passage East	Pier / Wharf	1800 -1820	NIAH
Passage East	Bastioned Fort	1568	SMR
Arthurstown	Arthurstown Coastguard Station	1895-1900	NIAH
Arthurstown	Pier / Jetty	1825-1830	NIAH
Duncannon	Duncannon North Lighthouse Keepers House	1835-1840	NIAH
Duncannon	Duncannon North Lighthouse	1835-1840	NIAH
Duncannon	Martello Tower (North)	1821-1820	NIAH
Duncannon	Martello Tower (South)	1810 -1820	NIAH
Duncannon	Granary	1842-1902	NIAH
Duncannon	Pier / Jetty	1845-1855	NIAH
Duncannon	Duncannon Fort (store/warehouse)	1770-1840	NIAH
Duncannon	Duncannon Fort (Barracks)	1770-1840	NIAH
Duncannon	Duncannon Fort (Magazine)	1770-1840	NIAH
Duncannon	Duncannon Fort (Magazine)	1770-1840	NIAH
Duncannon	Duncannon Fort (Misc)	1770-1840	NIAH
Duncannon	Bastioned Fort	1587	SMR
Duncannon	Castle	16th century	SMR
Duncannon	Duncannon Fort (Officers House)	1770-1840	NIAH
Duncannon	Duncannon Fort (Pill Box)	1940-1945	NIAH
Duncannon	Duncannon Fort (Misc)	1935-1940	NIAH
Duncannon	Duncannon Fort Lighthouse	1790-1795	NIAH
Duncannon	Duncannon Fort (Canon/Gun Emplacements)	1858-1863	NIAH
Duncannon	Duncannon Fort (Searchlight Emplacement)	1940-1945	NIAH
Duncannon	Duncannon Fort (Gates/railings/walls)	1720-1840	NIAH
Booley	Promontory Fort		SMR
Creadan	Prehistoric Scatter	Early/early middle Me-solithic period	SMR
Broomhill	Promontory Fort - coastal		SMR
Templetown	Millstone Quarry	1736 ?	SMR
Churchtown	Hook Head Lighthouse	1200-1245	SMR
Churchtown	Hook Head Lighthouse - keepers house	1865-1870	NIAH
Nymphall	Promontory Fort - coastal		SMR
Dunmore	Castle - Anglo Norman Masonary Castle		SMR

Dunmore	Watch Tower	1935-1945	NIAH
Dunmore	Boat House	1800-1840	NIAH
Dunmore	Promotory Fort - Coastal		SMR
Dunmore	Dunmore East Pilot Station (Coastguard Station)	1930-1950	NIAH
Dunmore	Watch Tower	1935-1945	NIAH
Dunmore	Pier / Jetty	1810-1815	NIAH
Dunmore	Dunmore East Lighthouse	1820-1825	NIAH
Dunmore	Fisherman's Hall	1830-1870	NIAH

Table 6: Buildings, Sites and Monuments of relevance to maritime heritage from the National Inventory of Architecture Heritage (NIAH) and Sites and Monuments Records (SMR)



Port of Waterford

The Maritime Heritage of Waterford Estuary
