

Appendix 1

Milford Haven Waterway Landscape of Outstanding Historic Interest

MORYD ABERDAUGLEDDAU MILFORD HAVEN WATERWAY

Moryd Aberdaugleddau.

Milford Haven waterway.

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Disgrifiad o'r tirwedd

Ria yw Aberdaugleddau, hynny yw, dyffryn a fodwyd ar ddiwedd Oes yr Ia ddiwethaf; mae ei dyfroedd dwfn ond cysgodol yn ymestyn 30km i mewn i'r tir o'i haber, cyn ymrannu yn Gleddau Ddu a Chleddau Wen, sydd wedyn yn parhau fel afonydd llanw am beth ffordd. Mae isafonydd megis Penfro, Caeriw a Cresswell a llawer o rai llai yn lloilo i'r aber yn gwneud cryn dipyn i gynyddu hyd y glannau a'r ei harfordir troellog a rhychiog. Ar y naill ochr a'r llall, ac yn ymestyn i bentiroedd Dale ac Angle yng ngheg yr aber, anaml y cyfyd llwyfandir arfordirol isel de Sir Benfro yn uwch na 80m uwchben SO.

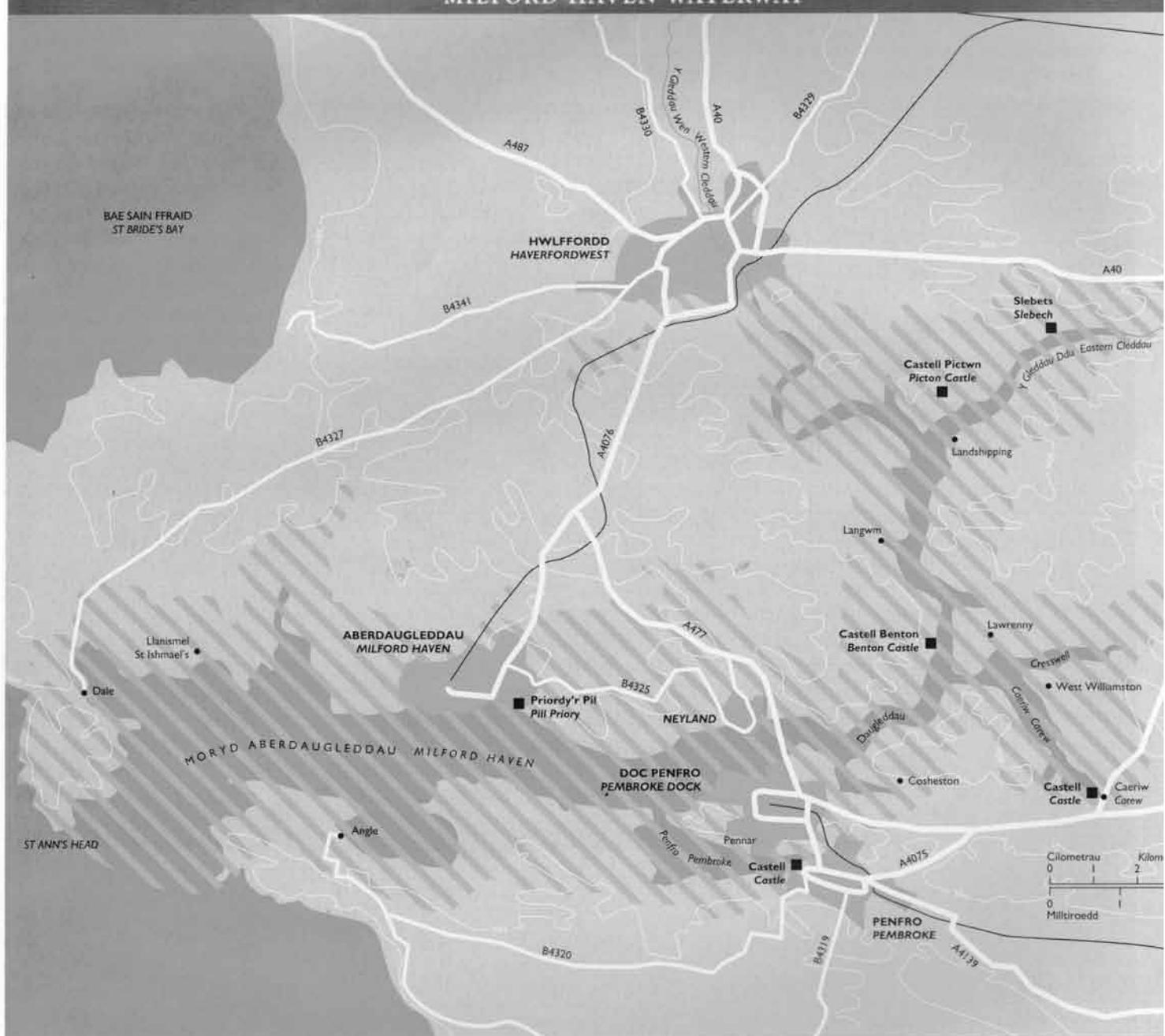
Mae tirwedd arfordirol Aberdaugleddau yn cwmpasu holl amred cronolegol gorchfygiad forwrol, aneddiadau, masnach, pysgota ac amddiffyn o'r 11fed ganrif i newidiadau'r 20fed

Landscape description

The Haven is a ria or drowned valley flooded after the end of the last Ice Age; its deep yet sheltered waters extend 30km inland of its mouth, before dividing into the Eastern and Western Cleddau which continue as tidal rivers for some distance. Tributaries such as the Pembroke, Carew and Cresswell Rivers and several smaller pills flowing into the Haven, significantly increase the length of its meandering and incised shore and coastline. On either side and extending to the Dale and Angle peninsulas at the Haven's mouth, the low coastal plateau of south Pembrokeshire seldom rises above 80m above OD.

The littoral landscape of Milford Haven encapsulates the whole chronological range of maritime conquest, settlement, commerce, fishing and defence from the 11th century to the

MORYD ABERDAUGLEDDAU
MILFORD HAVEN WATERWAY



ganrif. Dyma dirwedd amlwg a gwahanol iawn, yn dir a môr; dyma hefyd ei hynodrwydd. Mae'n dangos parhad a'r gallu i addasu, ac o ran lleoliad ac amrywiaeth nodweddion, y mae'n unigryw yng Nghymru os nad ym Mhrydain. Ac eto, er iddo addasu'n rymus i weithrediadau morwrol y diwydiannau olew a phŵer, mae'r tirwedd arfodirol amlgyfnodol hwn hefyd yn dibynnu ar gadw ei elfennau hanesyddol.

Y mae caerau pentir o Oes yr Haearn ar lawer o'r pentiroedd wrth fynedfa ac ar hyd yr aber a'r Daugleddau. Ceir dystiolaeth am safleoedd canoloesol cynnar, Cristnogol a Llychlynnaidd mewn enwau lleoedd, dogfennau ac arysgrifau, megis yr arysgrifau cofadeiliau Cerrig Cristnogol Cynnar, ond ni welir yr olion hyn bellach yn y tirwedd. Mewn gwrthgyferbyniad â hyn, mae olion y gorchfygiad Normanaidd, a gafwyd trwy leoli bwrdeistrefi cestyll mewn manau strategol ar yr arfordir, yn dal yn ddramatig o bresennol ym Mhenfro, Hwlffordd, ac yng Nghaeriw sydd

changing realities of the late 20th century. This is a highly articulate and distinctive land and seascape; its integrity is its highest factor. It exhibits both continuity and adaptation and its overall setting and range of features make it unique in Wales if not in Britain. Yet, despite its robust adaptation to the modern industrial and maritime operations of the oil and power industries, the integrity of this multiperiod coastal landscape also depends on the conservation of its historic elements.

Iron Age promontory forts are sited on several of the headlands at the entrance and along the course of the Haven and the Daugleddau. Early medieval, Christian and Viking sites are evidenced on place-name, documentary and epigraphic grounds, such as Early Christian Inscribed Stone monuments, but are no longer visible in the landscape. By contrast, the Norman conquest, achieved by coastally sited castle-boroughs, is still dramatically present at Pembroke, at Haverfordwest, and at Carew, all sited on the upper reaches of the rivers. Carew

Doc Penfro.
Pembroke Dock.



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oll ym mhen uchaf yr afon. Ni ddatblygodd Caeriw yn fwrdeistref, a dangosodd gwaith cloddio, ynghyd ag astudiaeth o dirwedd hanesyddol plwyf Caeriw, fod caer o'r Oesoedd Tywyll ac o bosibl, safle Brythonaidd-Rufeinig, yno cyn y castell Normanaidd, sydd, effallai, yn arwydd y bu canolfannau cyn-Normanaidd cyffelyb ym Mhenfro a Hwlfordd. Tyfodd y bwrdeistref hyn mor syrfdanol erbyn y 13edd ganrif yn rhannol oherwydd iddynt gael eu defnyddio fel mannau cychwyn i ymosodiadau'r Normaniaid ar yr Iwerddon.

Yn ddiweddarach, bu codi pont Cleddau yn derfyn ar gyfnod rhwydwaith o fferiâu ar draws yr aber, sy'n esbonio patrwm hanesyddol tramwyfeydd ac aneddiadau ar lannau'r Daugleddau, sydd i'w gweld o hyd yn olion y glanfeydd, pieri a jetiâu. Arweiniai'r llwybrau cynnar ar draws yr aber i Dyddewi a glanfeydd yr Oesoedd Tywyll. Ar droad y 18fed a'r 19edd ganrifoedd, codwyd dwy dref newydd, Aberdaugleddau ym 1790 gan Syr William Hamilton, a Doc Penfro ym 1802 pan

did not develop into a borough, and excavations, combined with a historic landscape study of Carew parish, has shown that a Dark Age stronghold and possible Romano-British site preceded the Norman castle, an indicator perhaps of similar pre-Norman foci at Pembroke and Haverfordwest. The precocious growth of these boroughs by the 13th century was partly because of their use as springboards for the Norman invasions of Ireland.

In more recent times, the construction of the Cleddau bridge marked the end of a network of cross-Haven ferries, which explains the historic pattern of communications and settlements on the shores of the Daugleddau still visible in surviving traces of landing places, piers and jetties. Early cross-Haven routes led to St Davids and Dark Age embarkation and landing points. At the turn of the 18th and 19th centuries, two new towns were constructed, Milford in 1790 by Sir William Hamilton, and Pembroke Dock in 1802 when the Royal Naval

drosglwyddwyd Dociau'r Llynges Frenhinol o Aberdaugleddau. Mae i'r ddwy dref gynllun rheolaidd; mae gan y naill a'r llall hanes o hawddfyd a dirwasgiad mewn adeiladu llongau a physgota, ac fel gorsafoedd terfynol i longau a rheilffyrdd. Er gwaethaf rhai newidiadau mawr yn niwedd yr 20fed ganrif, cadwodd y naill dref a'r llall eu trefweddau a'u glannau arbennig, ac erys llawer o Ddociau'r Llynges o hyd.

Golygodd newidiadau ym maint a thechnoleg llongau fod patrwm cynharach masnach arfordirol mwy gwasgaredig o lefydd megis Dale ac Angle yng ngheg yr aber wedi'i adleoli gyda chodi'r ddwy dref hon; digwyddodd hyn hefyd yn fwy graddol gyda masnach ym Mhenfro a Hwlfordd, a thueddwyd i ganolbwytio ar y dociau newydd. I raddau, mae hyn wedi cadw, hyd yn oed wedi ffosileiddio, ceiau, jetiau a glanfeydd ac aneddiadau bach megis Pennar, Lawrenny, Landshipping neu Cosheston (lle 'roedd dwy iard longau yn y 18fed ganrif), sydd yn uwch i fyny'r afon. Arferai'r porthladdoedd bach hyn wasanaethu maes glo Sir Benfro, sydd ar lannau'r Daugleddau, a hefyd y chwareli calchfaen mawr yng Ngorllewin Trewiliam, lle'r oedd cyfres ryfeddol o gamlesi byr trwy wastadeddau'r llanw yn caniatâu i ysgraffiâu fynd yn syth at wyneb y gwaith pan fo'r llanw'n uchel. Yr oedd porthladdoedd y Daugleddau yn llewyrchus yn yr 16fed, 17ail a'r 18fed ganrifoedd, ond bu iddynt ddal i weithio trwy gydol y 19edd ganrif, trwy newid i ddefnyddio ysgraffiâu i gludo nwyddau i lawr yr afon ac i longau mwy yn y porthladdoedd yn is i lawr yr aber.

Trowyd y cestyll canoloesol ym mhen uchaf yr aber, megis Benton, Pictwn a Chaeriw, yn dai i'r uchelwyr. Mae sefydliadau eglwysig canoloesol, rhai bach yn bennaf, fel Priordy'r Pil neu Rhaglyuddoldy Slebets, yn furddunnod, neu fe'u trowyd yn dai. Castell Pictwn yn unig sydd â hanes di-dor o breswyliad ac o gael ei droi yn blasdy helaeth gyda pharciau a gerddi oedd yn defnyddio blaendraeth cymerau'r Gleddau Ddu a'r Gleddau Wen. Ar y llaw arall, mae safleoedd gerddi a pharciau cynharach o'r 17ail ganrif, sydd wedi eu cadw'n dda ond wedi eu gadael yn segur, yn dal i gael eu darganfod, yr amlycaf yw gerddi terasog Tŷ Landshipping, nad yw'n bod mwyach.

Y mwyaf cyflawn o'r amddiffynfeydd milwrol a morwrol yn Aberdaugleddau yw Ceyrydd Palmerston, sy'n dyddio o ganol i ddiwedd y 19edd ganrif. Gellir gwerthfawrogi datblygiad amddiffynfeydd ac arfau'r Llynges yn ei gyflawnder trwy edrych ar y ceyrydd o'r môr ac o'r glannau, ynghyd â'r barics a'r ceyrydd mewndirol, y storfeydd a'r depos. Mae'r deinosoriaid milwrol hyn yn peri problemau cadwraeth a defnydd, ac y mae'r un tynged yn dechrau goddiwedd y rhan os nad y cyfan o etifeddiaeth diwedd yr 20fed ganrif i Aberdaugleddau, sef y jetiau olew a gweithfeydd prosesu'r diwydiannau olew a phŵer. Cyrhaeddodd y diwydiant hwn ei uchafbwynt yn y 1970au pan orfodwyd cwmniau cludo olew gan anhawsterau cyflenwi yn y Dwyrain Canol i ddefnyddio llwybrau'r moroedd i'r CCE (Cludwyr Crai Enfawr). Yr oedd Moryd Aberdaugleddau, gyda'i dyfroedd dwfn a'i safle ar arfordir gorllewinol gogledd orllewin Ewrop, yn arbennig o addas ar gyfer hyn. O ran effaith weledol ar y tirwedd presennol, nid oes modd anwybyddu'r diwydiant olew na trefnau rheoli trafnidiaeth y môr a redir gan Awdurdod Porthladd Aberdaugleddau.

Dockyard was transferred from Milford. Both towns have regular planned layouts, both have experienced a history of boom and slump in shipbuilding, fishing and as railheads and ocean terminals. Despite some major changes in the late 20th century, they both preserve distinctive townscapes and waterfronts and much still remains of the Naval Dockyard.

Changes in the ship sizes and technology meant that with the construction of these two towns, an earlier pattern of more dispersed coastal trade from places like Dale and Angle at the mouth of the Haven, and gradually from Pembroke and Haverfordwest, was relocated and concentrated in the new docks. This has to some extent preserved, even fossilized, quays, jetties and landing places and small settlements like Pennar, Lawrenny, Landshipping or Cosheston (which had two shipbuilding yards in the 18th century) further up river. These small ports served the coal mines of the Pembrokeshire coalfield located on both shores of the Daugleddau, and also the large limestone quarries at West Williamston, where a remarkable series of short canals through the tidal flats allowed direct barge access to the working faces at high tide. The Daugleddau ports flourished in the 16th, 17th and 18th centuries, but continued to work through the 19th century by changing to using barges to tranship cargoes down river to bigger vessels at the mid-Haven ports.

Medieval castles in the upper reaches of the Haven like Benton, Picton and Carew became transformed into gentry residences. Medieval ecclesiastical establishments, mainly small like Pill Priory or the Slebech Preceptory, survive as ruins or were adapted into residences. Only Picton Castle has an unbroken history of occupation and transformation into a great mansion with parks and gardens utilising the foreshore of the confluence of the Eastern and Western Cleddau Rivers. Conversely, well preserved sites of earlier, abandoned 17th century gardens and parks are still being recognized, notably the recently discovered terraced gardens of the vanished Landshipping House.

The most complete of the military and naval fortifications and service structures in the Haven are the mid to late 19th century Palmerstonian Forts. The development of naval defence and weaponry can be appreciated in its entirety by viewing the forts both from the waterway and from the shores together with barracks and inland forts, stores and depots. These military dinosaurs present problems of conservation and use, and the same fate is beginning to overtake some if not all of the late 20th century's legacy to the Haven, namely the jetties, oil terminals and shore processing facilities of the oil and power industries. This industry reached its zenith in the 1970s when Middle Eastern supply difficulties forced oil transport to use ocean routes in the VLCCs (Very Large Crude Carriers) for which the Haven, with its deep waters and westerly position on the north west European seaboard, was particularly suited. Visually, and in terms of the impact on the present landscape, the oil industry and the regulatory shore installations of traffic control and sea navigation systems run by the Milford Haven Port Authority cannot be ignored.

CRYNODEB

Rhif cyf	HLW (D) 3
Rhif map mynegai	5
Map AO	Landranger 157, 158
Sir flaenorol	Dyfed
Awdurdod unedol	Sir Benfro
Prif ddynodiadau belaeth	Mae rhannau o'r ardal ym Mharc Cenedlaethol Arfordir Penfro. Mae ochr ogledol Aberdaugleddau yn Ardal Amgylchedd Arbennig Preseli. Mae'r ardal yn cynnwys: Safleoedd o Ddiddordeb Gwyddomol Arbennig Bae Angle, Afonydd Caeriw a Cresswell, Chwareli Gorllewin Trewhiliam, Cosheston Pill, Daugleddau, Aber Gann, Afon Penfro a Gwastadeddau Pwllcrochan; Ardal oedd Cadwraeth Aberdaugleddau, Caeriw, Hwlfordd, Llangwm, Neyland, Penfro a Doc Penfro (Dociau Brenhinol).
Meini prawf	1, 3
Cynnwys ac arwyddocâd	Y ria glasurol yng Nghymru, sef dyffryn ac aber afon wedi'u boddi, gyda chasgliad diguro o olion sy'nadlewyrchu gorchfygiad forurol, aneddiadau, masnach, pysgota, amddiffyn a diwydiant o'r cyfnod cynhanesyddol byd at y cyfnod cyfoes. Mae'r ardal yn cynnwys: caearau pentir o Oes yr Haearn; enwau lleoedd Cristnogol Cynnar a Llychlynnaidd; burdeistrefi castell arfordirol y Normaniaid; cestyll canoloesol a phlasau diweddarach y gwyr bonedd; aneddiadau cynlluniedig Aberdaugleddau a Doc Penfro; ceiau, jetiau a glanfeydd, pyllau glo, chwareli calch, amddiffynfeydd milwrol a morerol, terfynellau, purfeydd a glanfeydd olew, a gorsaf buer diweddar a chyfoes.

SUMMARY

Ref number	HLW (D) 3
Index map no.	5
OS map	Landranger 157, 158
Former county	Dyfed
Unitary authority	Pembrokeshire
Principal area designations	Parts of the area are within the Pembrokeshire Coast National Park. The northern side of the Haven is within the Preseli Environmentally Sensitive Area. The area includes: Angle Bay, Carew and Cresswell Rivers, Cosheston Pill, Daugleddau, Gann Estuary, Pembroke River and Pwllcrochan Flats and West Williamston Quarries, Sites of Special Scientific Interest; Carew, Haverfordwest, Llangwm, Milford Haven, Neyland, Pembroke and Pembroke Dock (Royal Dockyard) Conservation Areas.
Criteria	1, 3
Contents and significance	The classic ria, drowned river valley and estuary in Wales, with an unsurpassed concentration of remains reflecting maritime conquest, settlement, commerce, fishing, defence and industry spanning the prehistoric to modern periods. The area includes: Iron Age promontory forts; Early Christian and Viking placenames; Norman coastal castle-boroughs; medieval castles and later gentry residences; Milford and Pembroke Dock planned settlements; recent and modern quays, jetties and landing places, coal mines, limestone quarries, military and naval fortifications, oil terminals, jetties, refineries and power station.

Ffynonellau detholedig / Selected sources

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West Wales Maritime Heritage Society, *The Secret Waterway: A Guide to the Milford Haven and Daugleddau Waterway*, 2nd edition (West Wales Maritime Heritage Society: Haverfordwest 1994).

I. Soulsby, *The Towns of Medieval Wales* (Phillimore: Chichester 1983) Haverfordwest 139–142, Pembroke 214–217.

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