

Feasibility

The purpose of this section is to help you carry out a basic feasibility assessment of your potential scheme at your proposed site. It includes guidance on how to assess each issue including desk research, enquiries and obtaining preliminary quotes. It aims to minimise your investigation costs at this stage and highlights potential 'showstoppers' that will need to be examined.

For most schemes you will need to employ technical experts to help you assess the site conditions, develop an appropriate design, obtain planning consent and meet construction standards. It is advisable to seek appropriate professional advice at this early stage.

This is not an exhaustive list and there may be other critical issues relating specifically to your site. More detail on these and other issues can be found in the [Design](#) pages of this website.

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Local Market Assessment

Fees for letting moorings will probably comprise your single largest income stream so a good demand forecast for your proposed site will be critical.

Demand

The demand for long-term moorings derives directly from the increase in popularity of inland waterway boat ownership. Approximately 95% of owners of powered craft on BW's waterways require a long-term mooring - the remaining 5% cruise around the network continuously not staying in any one place for any length of time. The Association of Inland Navigation Authorities (AINA) collates annual data from the leading navigation authorities that together show the national picture across the waterway network as a whole. We have collected data from 1992 to identify trends in boats licensed annually by British Waterways.

The main influences on demand for moorings at a specific new site are:

- **The choice and attractiveness of cruising routes from the proposed site.**

BW generates a proxy measure of boat traffic by means of lock counters. These record the number of times that a lock fills with water and gives an indication of the relative usage of different waterway stretches (the boat:lockage ratio averages up to 1.5 for narrow locks and 1.9 for wide locks). We publish a report which contains lockage data for individual waterways for 2002-2004.

- **The size and projected growth of the local boat owner market.**

Defining the market is an important first step. As a rule of thumb, around three out of four of all boat owners choose a mooring within 40 miles of their home. The demographic profile of the population within the catchment will have a significant bearing on demand: boat ownership is heavily concentrated amongst older, higher income households. The national penetration rate of BW boat owners is approximately 0.4 boat owners per thousand population, but this rises to nearly 2.5 owners per thousand amongst people aged 45-64 and living within 10km of a BW canal or river.

See links below for more information.

The size and character of the competition for your site. We publish information about existing mooring sites on our customer website waterscape.com. This will identify existing mooring sites in the vicinity of your site and may also include details of mooring rates and facilities. See link below

- **The extent to which existing mooring and marina provision meets current and projected future demand.** Mooring sites are differentiated primarily according to:
 - **Scale of facilities.** Customer preferences for different levels of services vary and the existence of waiting lists at different sites in the vicinity can give important clues to the local market. The most important factor for most

boaters is good security. Obviously the more facilities you provide, the higher the mooring fee you'll be able to achieve. Recent years have seen a reduction in small boatyards. As a result, **you may find significant demand for ancillary services such as slipways, dry and/or wet docks, services for boats passing by or wishing to stay for a short period.**

Residential moorings

A significant consideration will be whether to provide berths for residential boats. There is strong demand for residential moorings in some locations. They have a different impact on local communities than pleasure boats and will require specific planning permission. Early discussions with the LPA on this aspect should avoid difficulties once your scheme is submitted for approval. They may also raise issues relating to Council Tax. Most leisure marina operators find that random mixing of residential and leisure berths can create operational difficulties, so some zoning within the site that takes account of the differing needs of the two groups is worth considering.

Visitor moorings

There are few paid-for visitor moorings on the BW network in England & Wales but there is growing evidence of demand for more sophisticated services and security at popular destinations. Boaters are free to tie up almost anywhere along the towpath for short periods, and many enjoy peaceful, remote moorings with no facilities in the countryside. However, where demand regularly outstrips the space available at popular visitor moorings, BW makes a charge and/or restricts the length of time a boater may stay there. Depending on the location of your mooring site, you might be able to capture a share of the emerging market for superior overnight or short stay facilities.

Creating a destination

We encourage you to consider creating a destination on the waterway for a broad range of visitors, not just a place for boats to moor. Attracting the public onto your site with opportunities such as retail, catering, and leisure pursuits e.g. boat or bike hire to explore the wider area, can provide additional revenue and stimulate interest in your moorings.

There may be opportunities to capture a share of the passing boater market by making your services and facilities available to them as well as your long-term moorers. Contact our local waterway office to see if there are opportunities to provide essential boater services such as water, refuse disposal, elsan / pumpout etc.

Useful references and links

BW Customer website www.waterscape.com

Association of Inland Navigation Authorities www.aina.org.uk

[BW Annual Boating Data](#)

[Annual Lockage Report](#)

[BW Market Briefing Notes](#)

[BW Facilities Hierarchy](#)

A Code of Practice for the Design, Construction and Operation of Coastal and Inland Marinas and Yacht Harbours produced by The Yacht Harbour Association www.yachtharbourassociation.com www.thegreenblue.org.uk

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Financial Assessment

Configuring the layout of your water space to optimise mooring income is a critical step. Turning and manoeuvring circles and access routes to the entrance and facilities need to be carefully planned. The viability of the project will be very sensitive to the number of berths you can accommodate so it is worth spending time making sure you get this right. A pontoon supplier may be willing to provide an early indicative layout and basic costs.

Estimating annual income

Once you have an indication of the potential mooring capacity of the site it is fairly simple to estimate the potential gross income from moorings.

- **Set the mooring rate:** you need to research local mooring rates to determine the rate per metre you could charge. Refer to the [Getting Started - Assessing potential revenue and viability](#) page of this website for more guidance. You may set different rates for different types of moorings at the site.
- **Determine the occupancy :** calculate the gross mooring capacity in metres and make allowances for occupancy rates and voids. Check the link below for the average boat length for the waterway on which your marina will be located.
- Multiply the rate by the occupancy to produce a gross income figure. Mooring fees are subject to VAT.

Estimating annual costs

You will need to develop realistic annual running costs such as staff costs, annual and periodic maintenance, utility costs, insurance, rates etc. You will also need a Network Access Agreement with us to connect your marina or mooring basin to our network. The annual payment for this is currently calculated at 9% of the gross revenue potential, based on the site's agreed

mooring capacity. More information on this agreement can be found in the [Our Application Process - Legal Agreements](#) page of this website.

Development costs and viability

The scale of the development and the attributes of the site will obviously determine the cost of the scheme. The cost of fees, studies etc are usually at least an additional 20% - 30% of the cost of the scheme. Larger schemes and marinas which include other income producing activities such as boat sales, repairs, hire boats, retail sales cafes etc will require more sophisticated financial models. If you can calculate the indicative gross development cost, comparing this with projected income will give an early indication of viability. See our [InvestmentGuide](#) for some very broad indicative costs and revenues. A copy of this can be downloaded from this website. Be aware however that these will vary substantially according to local conditions, so you should not proceed without your own local research.

Grants

Your scheme may be eligible for certain grants, depending on its location, site conditions, method of construction and what you are aiming to develop. Criteria will apply and grants are always subject to funds available. The Local Authority may have a grants/regeneration/small business advisor who should be able to advise you.

In rural areas the government has grant schemes aimed at helping farmers adapt to changing markets and develop new business opportunities. See links below for more details. It is also worth checking with other regeneration agencies.

Useful references and links

DEFRA www.defra.gov.uk

Scotland and Wales www.direct.gov.uk

Regional Development Agency www.dti.gov.uk

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Desk Study

When purchasing a property a buyer will carry out a check on the property. Advice on development of property on brownfield land is available elsewhere (CIRIA, 2002), but marina developers may find such guidance useful in identifying issues.

Whether a marina development involves land purchase or not the same care as would be put into a property purchase should be put into looking at the

land and surrounding area for the marina. Enquiries should be made from the local authority and utility companies for any information relating to the site. This is likely to take time and should therefore be done as one of the first tasks. If purchasing the land your legal representative will advise commissioning a check using an environmental data search service. It is important to have such information but based on at least 1km radius around the site to pick up on nearby features that might be important. The information provided should include details of:

- Statutory wildlife designations
- Flood maps
- Outline geological information
- Potentially contaminative uses in or near the site
- Pollution incidents
- Activities licensed by the Environment Agency in the area

This information will help identify items that may be of concern at an early stage. At the Design stage this information, together with subsequent data gathered, will need to be pulled together into Land Condition Record to support any planning application.

Useful references and links

CIRIA (2002) Brownfields - managing the development of previously developed land. A client's guide (C578) www.ciria.org/acatalog/C578.html

Royal Institution of Chartered Surveyors www.RICSFIRMS.com (Select Firm Type - Environmental - Environmental Audit)

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Road Access and Utilities

Access to the nearest public highway can be a significant cost. Initial discussions with your Local Highway Authority should provide an early indication of whether road access will be permitted and whether highway improvements will be required. They are likely to be concerned about the impact of your customers' cars on local roads.

The cost of connecting to local services is likely to be a major cost and also diverting any services that may cross the site. You may also need to upgrade the capacity of existing services on site. You will therefore need to contact the local utility offices or arrange for a specialist surveyor to identify the necessary connections, diversions and costs.

In some locations, especially rural ones, it may be difficult or impossible to connect to the mains for disposal of surface water. If there are no other suitable ways of disposing of surface water (land drains, soakaways etc) BW can, subject to conditions and to the marina developer entering into a formal

agreement, permit clean surface water to be discharged into the marina basin and hence into the canal.

Useful references and links

Local Authorities www.communities.gov.uk

Water Companies www.water.org.uk

Power www.uswitch.com www.zyra.org.uk

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Ground Conditions

At the Feasibility stage a detailed site investigation is not required. However it is advisable to assess the site conditions which will impact on issues such as excavation, disposal of spoil, potential contamination and ultimately determine the method of construction and the major project costs. It is also advisable at this stage to identify whether or not the site has utility equipment or private services crossing it which will impact upon construction and use.

A detailed contour map and site walkover would give an idea of the levels and therefore any need to excavate or raise banks. The cost of disposing of excavated material off site, can be significant. It will assist the viability of your scheme if you can dispose of this within the site of the marina or on other land which you may own. This may require planning permission. If this is not an option seek estimates of disposal costs from local landfill operators. The permeability of the ground is of critical significance to the cost of construction. A geotechnical desk study and ground model at the initial feasibility stage will identify, quantify and determine how to manage the risks associated with the ground. Best practice is to compile a geotechnical risk register (which should include issues related to contamination, disposal etc.).

If the marina basin will hold more than 25,000 cubic metres of water **above ground level** it may come under the provisions of the Reservoirs Act 1975. For more information check the link below.

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Useful references and links

British Geological Survey www.bgs.ac.uk

British Dam Society www.britishdams.org/reservoir_safety/

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Locating the Marina Entrance

The location of the entrance connecting to the navigation, is an important consideration in terms of providing for safe access and egress to the waterway. We have produced an advisory entrance layout drawing which you should have regard to when producing your Feasibility drawings.

For more details please view the section;
Design > Performance Criteria > [Locating the entrance of the mooring basin/marina>](#)

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Water Levels and Flood Risk

It is strongly recommended that you contact the Environment Agency (EA) to establish their initial considerations, including advice on whether your site is in the flood plain and other water level or drainage issues to consider. This can be done using a Pre-Application Form (see link below) to ensure that all relevant information is available for the EA to assess.

Local Planning Authorities (LPAs) in England have to consult with the EA on most development proposals at risk from flooding. Planning Policy Statement 25 (PPS 25) 'Development and Flood Risk' and its associated Practice Guide set out Government policy and advice on the subject.

LPAs in Wales are advised to consult the EA on development proposals that are at risk from flooding through the Welsh Assembly's Technical Advice Note 15 (TAN 15) 'Development and Flood Risk'.

The EA provide technical advice to LPAs and developers on how best to avoid, manage and reduce the adverse impacts of flooding.

You should also discuss any flooding issues with British Waterways as there may be impacts on canal infrastructure. In addition any surface water discharge into the marina/canal (if permitted) needs a formal agreement with British Waterways, please refer to the link below.

Useful references and links

Surface Water Discharge
www.britishwaterways.co.uk/marinadevelopment/application/legal_agreements.php

General EA Development and Flood Risk information
www.environment-agency.gov.uk/aboutus/512398/908812/1351053/571633/?lang= e

Planning Policy Statement 25 - 'Development and Flood Risk' (PPS 25)
www.communities.gov.uk/publications/planningandbuilding/pps25floodrisk

Practice Guide on PPS 25 - 'Development and Flood Risk'
www.communities.gov.uk/publications/planningandbuilding/developmentflood

Fact sheet on PPS 25 - 'Development and Flood Risk'
www.environment-agency.gov.uk/commondata/acrobat/pps25factsheet_1657913.pdf

Developments in Wales - Technical Advice Note 15 - 'Development and Flood Risk' (TAN 15)
<http://new.wales.gov.uk/about/departments/depc/epcpublications/PlanPubs/TAN/TAN15?lang=en>

Flood Map (enter postcode in box on right hand side of the website page)
www.environment-agency.gov.uk/subjects/flood/?lang=e

The Pre-Application Enquiry form
www.environment-agency.gov.uk/aboutus/512398/908812/1351053/1351105/?version=1&lang=e

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Planning

It is important that you seek advice from the Local Planning Authority (LPA), normally your local council, at an early stage in order to determine the likelihood of obtaining planning permission for the development you are considering. The websites of the Department for Communities and Local Government provide comprehensive information.

National and regional planning guidance together with the site allocation and policy designations within the Development Plan will be important factors and your local Development Control Officer should be able to assist. You could also inspect the Planning & Constraints Registers held by the LPA. The LPA may be prepared to summarise these informal discussions in a letter, but be aware these comments will not determine their formal decision on any planning application you subsequently make. In any event these discussions will help you decide whether to proceed with your scheme.

Whilst you should obtain your own professional advice it will often be helpful to discuss with us your approach to the LPA. We employ qualified planners who maintain regular contact with LPAs and we may be able to provide some guidance. The document 'Planning Guide for Boating Facilities' produced jointly by the British Marine Federation and the Royal Yachting Association also contains very useful information in respect to planning.

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Useful references and links

Department for Communities and Local Government
www.planningportal.gov.uk and www.communities.gov.uk

'Planning Guide for Boating Facilities' produced jointly by the British Marine Federation www.britishmarine.co.uk and the Royal Yachting Association www.rya.org.uk

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Archaeology and Historic Structures

An initial assessment of the archaeology and historic structures of the site is important. Initial discussions with the local authority should highlight statutory designations and significant or potential issues that need to be considered. A review of desk based information such as the National Monuments Record, aerial photograph archives, local studies libraries and the county Sites and Monuments Record should also be undertaken.

The local canal society or trust and the Waterways Trust may also hold useful information. Planning guidance for Archaeology and the Historic Environment can be found on the government's planning portal through the link below. A walk-over assessment of the site by a qualified Archaeologist or Buildings' Historian (depending on the interest of the site) to identify features such as earthworks or above-ground structures may also be beneficial.

Evaluation and interpretation of the results should be undertaken by a suitably qualified professional who will be able to advise you of potentially major issues and statutory requirements at this stage and the need for further archaeological investigation now, or at later stages of the works.

Other issues such as how the development may affect the setting of Scheduled Ancient Monuments or listed buildings should be evaluated.

Useful references and links

The Waterways Trust www.thewaterwaystrust.co.uk

Government Planning Portal www.planningportal.gov.uk and www.communities.gov.uk

Council for British Archaeology www.britarch.ac.uk

Archaeology Data Service www.ads.ahds.ac.uk

English Heritage www.english-heritage.org.uk

Cadw www.cadw.wales.gov.uk

Society for the Protection of Ancient Buildings www.spab.org.uk

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Wildlife and the Natural Environment

A desk study should be undertaken to identify any statutory or non-statutory designated wildlife sites and protected species which may be affected by the development. The environmental datasearch will show statutory protected sites. Alternatively a quick check can be made online using the multi-agency Geographic Information for the Countryside website (see link below). Local interest groups such as county wildlife trusts or wildlife recording groups may also have useful data on protected species

The presence of a site with statutory protection based on the canal and notified for aquatic features within a day's cruise of the proposed marina site may be an issue.

If statutory wildlife site/s and/or protected species are likely to be directly or indirectly affected by the development, then in the first instance you should talk to the local office of the statutory wildlife regulator; English Nature (soon to be Natural England) or the Countryside Council for Wales They will be able to advise on the feature's significance and any further action you may need to take, e.g. survey work. If a statutory wildlife site is affected by the development, it is highly unlikely that Planning Permission will be granted.

A walk-over assessment of the site should be carried out at a suitable time of the year to identify any potential for protected species or other issues. This work should be undertaken by a suitably insured chartered professional with ecological expertise.

The area of the desk study and walk-over assessment should include the site of the new mooring basin itself, any associated infrastructure and the waterway itself in the vicinity which may be affected by any increased usage. If access to the site during the construction and/or operation phases is limited or difficult, you will also need to take into account whether any temporary or new access may impact on a designated wildlife site/protected species. Any effect the development may have on sites/species distant from it but affected by it, e.g. by hydrological connection must also be considered.

If statutory wildlife site/s and/or protected species are likely to be directly or indirectly affected by the development, then in the first instance you should talk to the local office of English Nature or Countryside Council for Wales, They will be able to advise on the feature's significance and any further action you may be need to take, e.g. survey work.

The local Wildlife Trust can advise on the significance of non-statutory wildlife sites such as County Wildlife Sites. These are frequently given protection through policies in local plans which will be considered through the planning process.

Useful references and links

Local Wildlife Trusts www.wildlifetrusts.org

English Nature www.english-nature.org.uk

Countryside Council for Wales www.ccw.gov.uk

Environment Agency www.environment-agency.gov.uk

National Biological Records Centre www.brc.ac.uk

National Biodiversity Network www.nbn.org.uk

Multi-agency Geographic Information for the Countryside www.magic.gov.uk

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Land Ownership and Covenants

You will need to establish that sufficient ownership of land (or rights over land owned by others) exists to enable your scheme to proceed and to subsequently operate and manage it. Land may be subject to restrictions on development or use.

Examples of such restrictions include covenants in title documents for the land (enforceable terms between parties) restricting development or use. There may be rights of way across the land. Engage professional advisors who will be able to look into and advise you further as to whether or not such considerations apply to the land relevant to your scheme.

Useful references and links

Royal Institution of Chartered Surveyors www.ricsfirms.com

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