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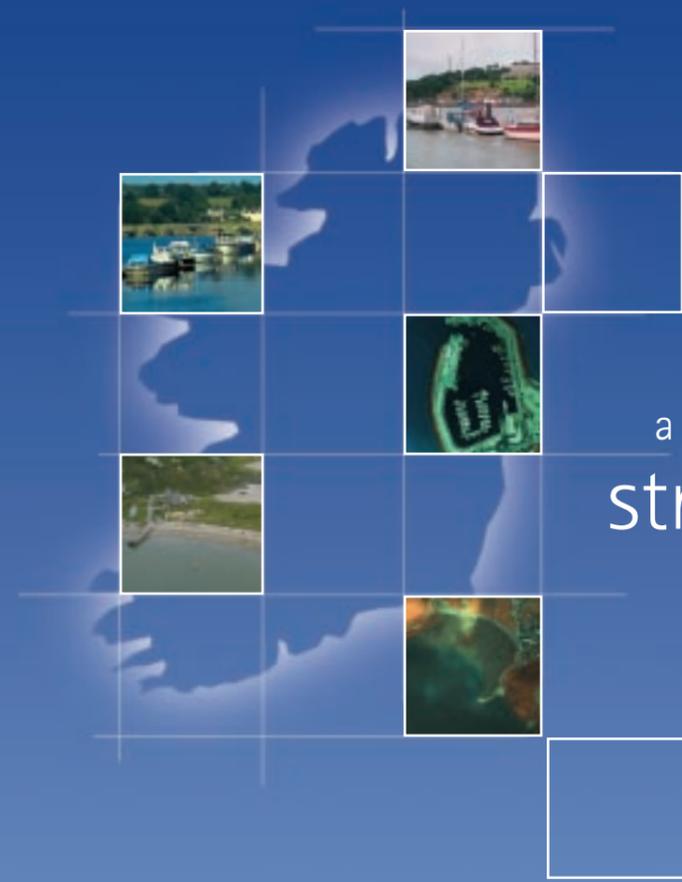
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a development
strategy for marine
leisure infrastructure





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foreword

The Marine Institute's initiative in undertaking this study of access locations for marine leisure is both welcome and timely. Investment in the marine leisure sector is included as part of the National Development Plan, and the improvement of access infrastructure has been targeted as the primary focus for development.

As the study itself highlights, the lack of both information on Ireland's sea access locations and a systematic assessment of priority locations for capital investment has, up to now, made it difficult to develop a coherent strategy for the sector. I am pleased that considerable progress has now been made in this area and commend the Marine Institute on their approach

The study brings together important information on the types of leisure users, their requirements in relation to access and facilities, criteria for identifying suitable access locations and proposals for priority development. It also underlines the important principle of integrated and strategic development, which is the core of the National Development Plan and will be fully reflected in the Marine Tourism Grant Scheme.



Frank Fahey TD
MINISTER FOR THE MARINE & NATURAL RESOURCES



introduction

In July 1999 the Marine Institute published an *Investment Strategy for the Water-based Tourism and Leisure Sector in Ireland 2000-2006*. The strategy recommended a programme of investment aimed at;

- (1) the provision of new infrastructure and facilities strategically positioned around the coastline
- (2) the development of high quality integrated clusters of water-based tourism and leisure activities which would attract overseas and local visitors.

These recommendations were incorporated into the National Development Plan 2000-2006 where investment will be provided via a range of initiatives administered by: the Department of the Marine and Natural Resources (Marine Tourism Measure); Central Fisheries Board (Tourism Angling Measure); Bord Fáilte (Tourism Measure); Local Authorities and Sports Council (Culture, Recreation and Sports and Local Development Measures). Specifically, financial provisions have been made within the NDP to contribute towards the development of new and existing infrastructure for the leisure sector.

The Marine Institute has published "A Development Strategy for Marine Leisure Infrastructure" to assist in targeting investment decisions so as to ensure that new developments meet the needs of three key target groups:

- Overseas tourists
- Domestic tourists
- Local residential populations for sport and recreation.

The report sets out the criteria which can be used as a guide in the evaluation of future development projects. The report applies this criteria in a national context to produce a balanced development strategy which addresses user demand, scale and spatial and environmental considerations. The economic or technical feasibility of developing any of the proposed locations was not examined in detail. All proposed development will require a full feasibility study.

The Marine Institute believes that in order to achieve maximum benefit from the investment programmes that exist, there must be a coherent national plan which seeks to integrate the development requirements of the marine leisure sector with the requirements of other marine sectors. This report should be seen as a contribution to the debate on how best to develop our significant coastal resources for tourism and leisure.

general user requirements

Any new network of marine leisure facilities will need to cater for a variety of users so it is useful to begin by defining who these users are and what their requirements are likely to be.

The leisure boating sector can broadly be categorised into two groups, those requiring;

- access from the land to sea and
- access from sea to land.



Land to sea access

Those requiring frequent access from land to the sea may include the following:

- Casual users who simply enjoy the experience of being on water. They will generally have inflatable boats or small rowing boats for individual or family use.
- Casual sport users who may have jet skis and speedboats and may also water ski.
- Non-commercial fishing groups who are likely to use medium sized rowboats or outboard motor boats.
- Sports divers who normally use large inflatables or RIBs.
- Sailors who may have small single-handed boats or sailing dinghies up to 5m length.

These users are most active during the summer season (weekends/holidays) especially when the weather conditions are favourable. They do not have any permanent mooring location and transport their boat to different locations via a car trailer or roof-rack where it is launched and removed from the water usually in the same day.

Sea to land access

While all leisure craft require access from water to land, good quality permanent facilities are required for:

- visiting yachtsmen and
- resident yachtsmen with long-term berthing needs.

Sailors are most active in the summer season, when they may cruise for long distances. In other seasons they use their vessels for shorter (day) trips, particularly during mild weather conditions. In winter they require safe/sheltered berthage or the facility to be able to remove their boat from the water. Access problems normally arise in the summer season when boats from many different locations converge on a particular destination that does not have the infrastructure to cope with such a large influx. In such situations the provision of pontoons or swinging moorings can satisfy this seasonal demand for this user category.

Key access requirements

While some users may have specific requirements, most can be accommodated by addressing the key common requirements which are:

- Access for all tidal, wind and wave conditions. This condition requires that not only should the pier/slipway not dry out but adequate shelter (either natural or manmade) should also be provided. In practice, this condition is very difficult to achieve and economically may not be justifiable.
- Easy navigation into and out of pier/harbour – presence of marker buoys, no/limited tidal restrictions and low currents (<1m/s), etc.
- Adequate and safe moorings.
- Proximity to natural cruising routes. Very often boats will not deviate very far from the route that will take them to their ultimate destination.
- Direct shoreline facilities – water, diesel etc.
- General land facilities – shops, pubs, restaurants, parking etc.
- Land access – good road network.
- Proximity to population centre.

existing infrastructure

Many of Ireland's small piers, harbours and slipways are tidal, allowing access to the water or to berthing for very limited times before and after high tide and only providing a degree of shelter from the prevailing winds and predominant waves. This situation is commonly accepted and creates few problems for commercial users who plan their activities accordingly. The expectations and needs of those taking part in leisure boating are somewhat different and tidal restrictions in particular are regarded as an unacceptable inconvenience. Many leisure craft simply cannot safely tie up at a drying berth and for them, a tight tidal window is not sufficient to make a depth-restricted pier. Where good marine leisure facilities exist, they are usually located in areas where there is a high level of natural or artificial protection. They often coincide with commercial ports or fishing harbours where large capital funding was not required for their establishment.



The geographical distribution of Ireland's sea access infrastructure reflects very much on the physical attributes of the coastline, in addition to past population trends and activities. The majority of structures were constructed in the last century and were sited solely to facilitate the local fishing industry. Leisure use was not generally a design consideration but very often developed as a consequence of a pier/slipway construction. On soft straight coastline, access points tended to be well spaced and normally tried to use some natural feature to provide protection i.e. inlet, rocky headland, bay etc., whereas, indented rocky coastlines, with more isolated communities and bad road networks, tended towards frequent access points. This difference is aptly illustrated by considering the counties of Galway and Wicklow, which have 197 and 6 recorded access points respectively.

To date, development of marine leisure access facilities have been undertaken largely on an ad hoc basis and mainly as an add-on to commercial port or fishery harbour expansion/improvement projects. In future, where possible, an integrated approach to infrastructure development should be taken so as to maximise the return on investment in infrastructure and facilities.

future development

To optimise the impact of investment, development will need to be prioritised. This can be achieved by concentrating on a limited number of new facilities in key locations, in conjunction with enhancement or upgrading of existing facilities. The main objective should be to maximise the range of marine leisure activities that can take place at each site.

Marina development can have a significant positive impact at local and regional level. The main findings of a socio-economic impact study commissioned by the Marine Institute on a number of existing marina developments can be summarised as follows:

- The presence of small/medium size marinas (55 – 80 berths) can generate from £430,000 up to £690,000 of revenue annually in local economies.
- Between 20 and 32 Full Time Equivalent (FTE) jobs may also be generated, based on such facilities.
- While the marina facilities may not generate significant profit themselves, up to 13 times as much income may accrue to the local area from associated activities.
- Locally co-ordinated strategies taking advantage of the opportunities for clustering marine leisure activities, from a marina base, can provide significant economic spin-offs.
- Marinas on Ireland's east and south coasts could sustain further developments whilst those on the less frequented west coast could easily become marginalised by over development.



Understanding the potential market and socio-economic impacts of a marina development on a coastal community is therefore essential if balanced development is to take place on a national scale.

development strategy

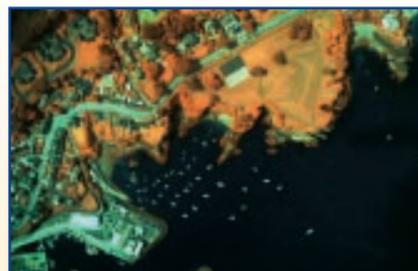
In order to satisfy the present and immediate future needs of the marine leisure sector it is proposed that existing coastal leisure infrastructure is upgraded so that the following minimum facilities are provided to the various users:

- The establishment of fully sheltered moorings/marinas with all ancillary facilities. The aim being to provide a sufficient coverage of good quality facilities throughout the whole coastline with a maximum spacing between such sites being of the order of 100 miles. Other work at these sites may require improving existing structures, construction of breakwaters and dredging.
- Provision of non-tidally restricted piers/slipways and/or alternative access structures at 25 – 50 miles apart. At these locations, upgrading work could involve extending and improving piers and slipways and possibly dredging.

The first type of development would be of benefit to all marine leisure users but more particularly for the 'sea to land' users who would use the marina for berthing their vessels. The second type of development is primarily aimed at the 'land to sea' users. Such recreational users would launch primarily during the summer months when environmental conditions are mild and would not stay in the water for long periods. Therefore they have relatively low requirements but it is important that launching sites are provided at frequent intervals along the coastline.

While a basic network of marine leisure facilities exists, in order to meet the growing demands of this sector, suitable locations for further development and improvement need to be identified. In addition to what has been said in previous sections, these locations should meet the following criteria:

- Possess a high level of existing access infrastructure and/or provide natural shelter, thus minimising development costs.
- Have a degree of boating activity already established.
- Have sufficient land infrastructure to cope with any development, i.e. water and drainage schemes etc.
- Be a gateway to an area of natural beauty or historical significance.



Obviously these criteria are more important for larger developments and it is expected that no location will satisfy all of them perfectly. However, by using it as a basic checklist the suitability of various sites can be assessed. Where two locations are in close proximity to one another and have the same general attributes, development costs should be the prime consideration for choosing the more suitable location. It is likely that many of the suitable locations will correspond to existing fishing harbours and development plans will have to be devised with the view to harmonising development of the resource while minimising potential conflict of use.

site selection methodology

A two-phased approach was taken to identify potential locations for development.

Phase 1

The preliminary selection of potential development locations was made using a specially developed database. The database contained information on all documented access locations, with each site graded in terms of shelter afforded, facilities provided, state of repair, usability at low tide etc. This information was integrated into a GIS, which lent the data greater flexibility as well as allowing it to be easily viewed in a spatial sense. In addition, 85 Ordnance Survey digital Discovery tiles were purchased for the Irish coastal area and also linked to the database. These provided additional information in relation to:

- Urban areas,
- Road networks,
- Tourist features (camping sites, picnic areas, viewing areas etc.),
- Services (public telephones, post boxes, car parks etc.),
- Other services (light houses, emergency services etc.),
- Coastal type (sand, cliff etc.),
- Buildings and
- Water bodies.

Phase 2

To ensure that up-to-date information was included in the database and to identify potential sites for development, consultations were held with each relevant Local Authority, the Development of the Marine and Natural Resources, other Government Departments and a number of marine leisure organisations.

A database query was set up whereby each location was scored against the established criteria. The scores were totalled to give an overall assessment of a site's suitability for development. For example, sites close to roads, services, urban areas and providing good shelter scored high whereas remote sites in a poor state of repair scored low. Having assessed the information from the database, further consultations were undertaken with local authorities to validate the results of the assessment. Existing marinas, which generally scored highest, were included in the analysis only in so far as their geographical location influenced the choice of other sites.



categorisation of development types

An assessment was made of the appropriate scale of development for each of the sites identified. The potential scale of development was categorised as follows:

- Large Scale – Provide in excess of 75 berths (large marina and associated works).
- Medium Scale – Provide 25 – 75 berths (marina /boarding pontoons).
- Small Scale – Provide 0-25 berths (slipway/pier construction, maybe small marina).

Additional descriptors were provided to further distinguish the development types within the above three categories. In the following maps, a distinction is made between locations where a development would:

- Satisfy a local demand (labelled L/D on the map). It is possible that relatively large coastal towns could support a moderate marina development primarily on the basis of local usage even though it may have a number of general shortcomings that would discourage cruising boats.
- Be an important site either for ‘sea to land’ users (labelled S/L on the map) or ‘land to sea’ users (labelled L/S on the map).
- Be also beneficial to existing fishing or other commercial activity in the harbour, where there is significant potential for a leisure development to be integrated with other marine activities (labelled ‘Int.’ on the map).

preliminary site selection

The preliminary assessment of coastal leisure facilities indicated that access along the east and south coast of Ireland (Louth to Cork Harbour) is generally well developed and, due to the proximity of large population centres, most locations could justify an augmentation to their existing facilities. A number of sites found suitable for further development consisted of establishing a marina within an existing harbour i.e. at Wexford, Helvick and Ballycotton.

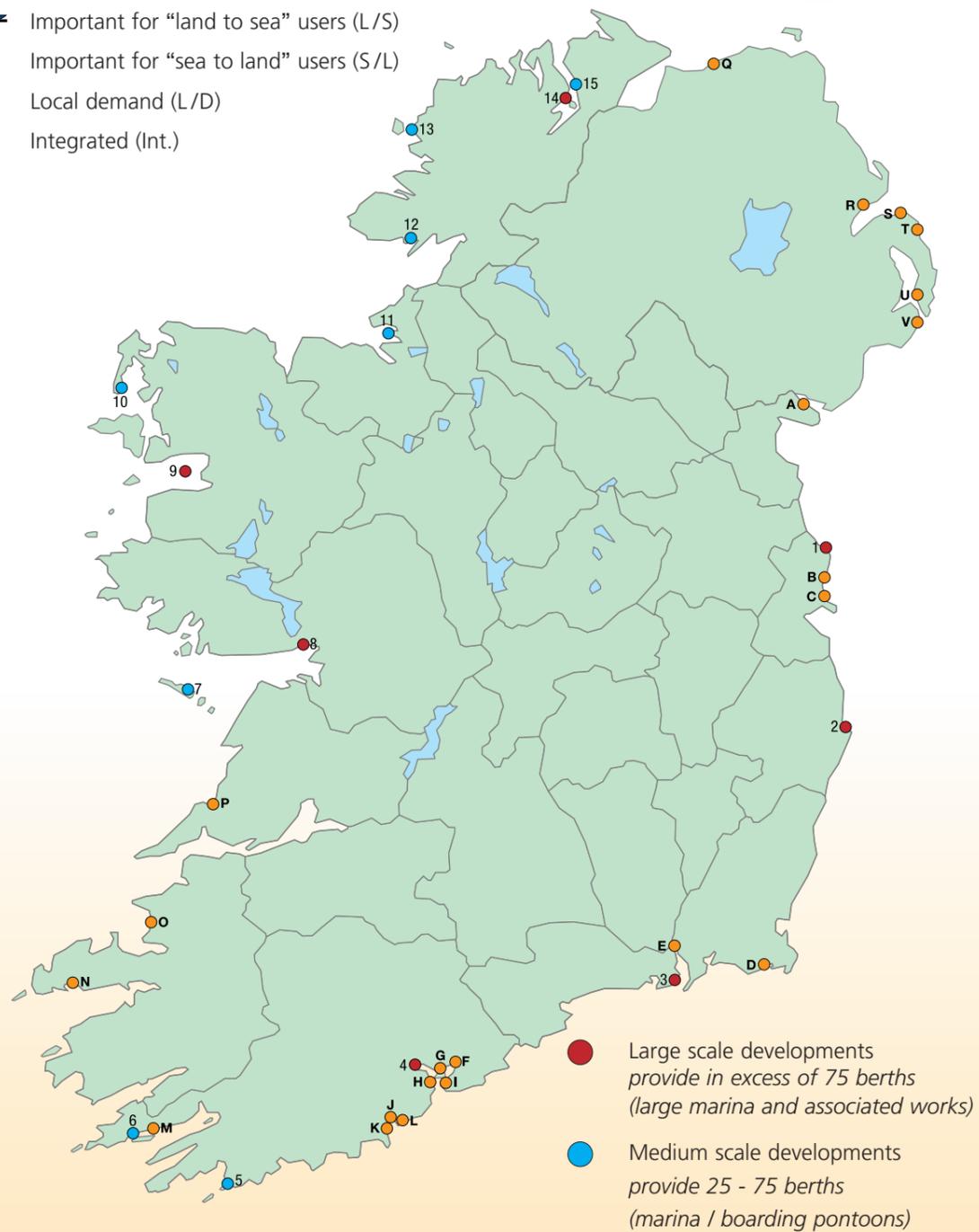
The indented coastline of the south west (west Cork and Kerry) has numerous access points, the most important of which have been repaired or improved by the respective Local Authorities in recent years. In Cork, there is a need for a large development in the Baltimore/Schull area. Castletownbere harbour is strategically well located and would benefit from the development of leisure boat facilities. However, these should be well withdrawn from the fishing activity of the harbour. In Kerry recent developments in Dingle and Fenit meet the needs for large scale marinas in this area.

The west coast (Clare to Donegal) is a prime location for future investment in marine leisure facilities. While it is unlikely that the level of leisure boating activity will ever match that on the east coast, the aim is to provide good quality access facilities at strategic locations for the leisure boating sector. It is interesting to note that there is currently no marina north of Kilrush, although several visitor mooring sites have been established and a number of pier improvements have been undertaken by Local Authorities. As regards particular sites, Kilronan is identified as a potentially strategic site for development, whilst the rapidly growing Galway area could readily justify a marina. Other large population centres along the west coast, Clifden, Westport, Killala, Sligo and Donegal, would require smaller scale developments (up to 50 berth). From a marine leisure viewpoint, north Mayo is under-developed at present and careful consideration needs to be given to the siting of a major development. The provision of improved leisure boating facilities in Clew Bay and Blacksod Bay would considerably improve the network of access infrastructure in this area. It is recommended that feasibility studies be carried out to identify the most suitable sites for a marina complex as the development of infrastructure at both these locations would require a relatively large capital expenditure. In Donegal, the fishing ports of Killybegs and Burtonport have been proposed as strategically important sites and marina developments currently planned for Rathmullen and Bunrana should complement the network of leisure boating access facilities in this area.



large & medium scale developments

- Important for "land to sea" users (L/S)
- Important for "sea to land" users (S/L)
- Local demand (L/D)
- Integrated (Int.)



Proposed Large & Medium Scale Developments

Location	Development Descriptor			
	(L/S)	(S/L)	(L/D)	(Int.)
1 Skerries				
2 Wicklow				
3 Dunmore East				
4 Cork Harbour				
5 Baltimore				
6 Castletownbere				
7 Kilonan				
8 Galway City				
9 Clew Bay				
10 Blacksod Bay				
11 Rosses Point				
12 Killybegs				
13 Burtonport				
14 Rathmullan				
15 Buncrana				

Existing Marinas

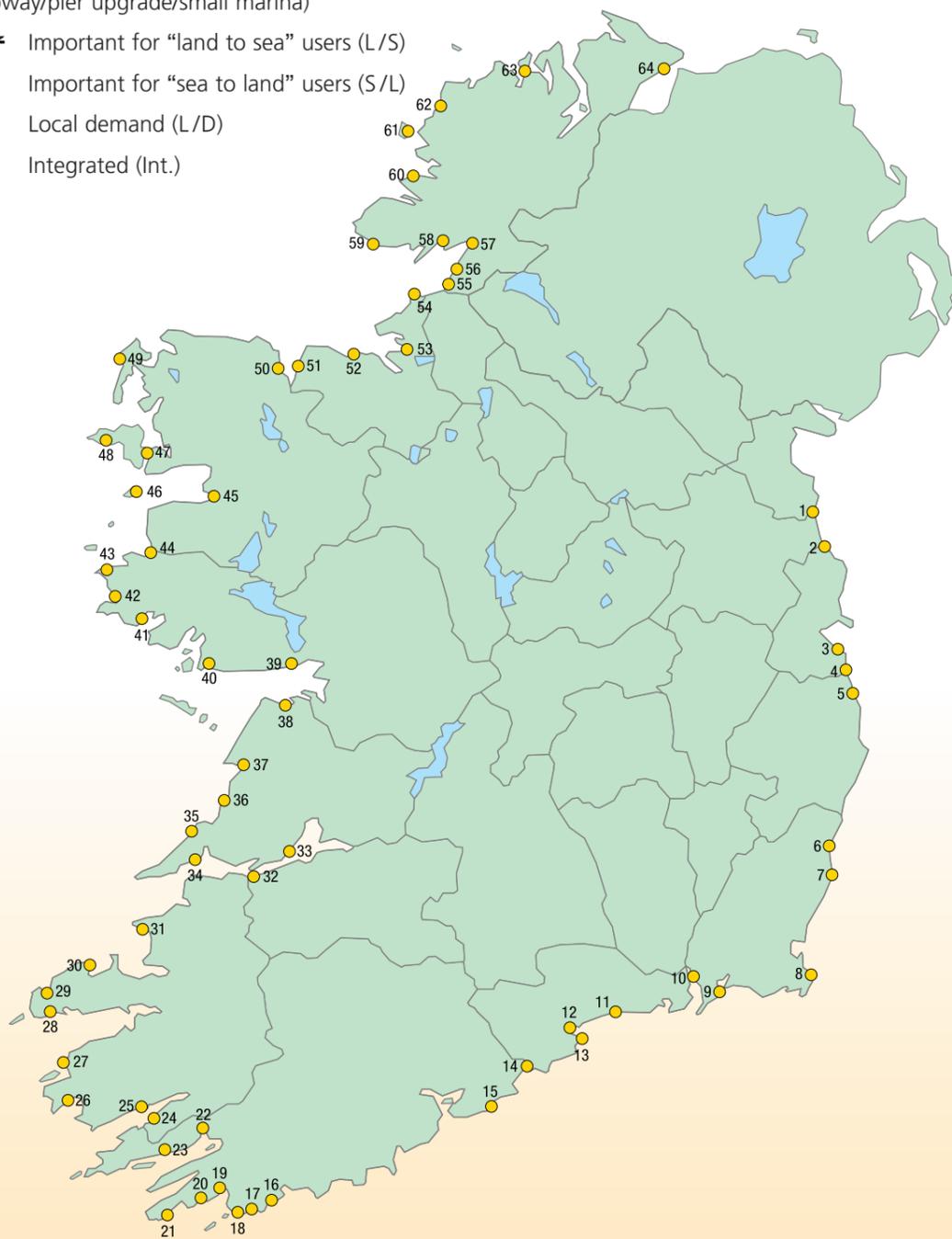
- A Carlingford Marina
- B Malahide Marina
- C Howth Marina
- D Kilmore Quay Marina
- E Waterford City Marina
- F East Ferry Marina
- G Salve Marina
- H Crosshaven Boatyard
- I Royal Cork Yacht Club
- J Kinsale Yacht Club Marina
- K Trident Marina
- L Castlepark Marina
- M Lawrences Cove Marina
- N Dingle Marina
- O Fenit Harbour Marina
- P Kilrush Marina
- Q Coleraine Marina
- R Carrickfergus Marina
- S Bangor Marina
- T Copelands Marina
- U Portaferry Sailing Club
- V Ardglass Marina



small scale developments

Small scale - provide up to 25 berths
(slipway/pier upgrade/small marina)

-  Important for "land to sea" users (L/S)
-  Important for "sea to land" users (S/L)
-  Local demand (L/D)
-  Integrated (Int.)



Location	Development Descriptor	Development Descriptor				Location	Development Descriptor	Development Descriptor			
		(L/S)	(S/L)	(L/D)	(Int.)			(L/S)	(S/L)	(L/D)	(Int.)
1 Drogheda Estuary						33 Killyadysert					
2 Balbriggan						34 Carrigaholt					
3 Dublin Bay						35 Kilkee					
4 Bray						36 Seafield					
5 Greystones						37 Liscannor					
6 Courtown						38 Ballyvaughan					
7 Cahore (Polduff)						39 Barna					
8 Rosslare						40 Rossaveal					
9 Fethard						41 Roundstone					
10 Duncannon						42 Clifden					
11 Knockmahon						43 Knockbrack					
12 Dungarvan						44 Little Killary					
13 Helvick						45 Westport					
14 Youghal						46 Clare Island					
15 Ballycotton						47 Green Pier					
16 Castletownsend						48 Dooagh Pier					
17 Tragumna						49 Frenchport					
18 Union Hall						50 Killala					
19 Ballydehob						51 Enniscrone					
20 Schull						52 Aughris					
21 Crookhaven						53 Sligo Town					
22 Glengarriff						54 Mullaghmore					
23 Adrigole						55 Ballyshannon					
24 Kilmackilloge						56 Creevy					
25 Sneem						57 Donegal Town					
26 Ballinskellig						58 Iver Bay					
27 Cahersiveen						59 Teelin					
28 Ventry						60 Portnoo					
29 Ballyrannig						61 Stackamore					
30 Brandon						62 Bunbeg					
31 Dromatoor						63 Downings					
32 Glin						64 Merville /Carrickarory					



conclusions and recommendations

The sites chosen in this study are initial recommendations and have not been justified as being economically feasible. For any proposed investment in marine leisure infrastructure it is recommended that a feasibility study, incorporating an engineering study and a cost benefit analysis of the proposed development should be undertaken. Such a study should satisfactorily demonstrate that a capital investment will provide positive economic and social benefits to a region and prove the long-term viability of the project. The fact that a specific site is not included in this development strategy does not mean that it should be totally excluded from funding grants for development purposes. It may be that on closer examination a number of proposed sites may not prove feasible due to other variables and alternative nearby locations will have to be found.

For the future, it is recommended that the marine leisure infrastructure database is upgraded and updated so as to improve its performance as a planning and information tool. Ireland is now at a vital juncture in terms of marine leisure infrastructure development, with large investment in development currently on-going as well as planned for the future. In order to achieve maximum benefit from the investment programmes there must be a co-ordinated, nationally based plan in place that integrates the requirements of the marine leisure sector with other marine resource users.