

Co-ordinated Local  
Aquaculture Management  
Systems

CLAMS  
Explanatory Handbook





## What is CLAMS?

The unique Co-ordinated Local Aquaculture Management Systems (CLAMS) process is an all island initiative to manage the development of aquaculture in bays and inshore waters at a local level. In each case, the plan fully integrates aquaculture interests with relevant European and national policies, as well as:

- (1) Single Bay Management (SBM) practices, which were initially introduced by salmon farmers in Scotland to co-operatively tackle a range of issues, and have now been extended to all aquaculture species,
- (2) the interests of all other groups using the bays and inshore waters,
- (3) Integrated Coastal Zone Management (ICZM) plans.

The process has been widely adopted in bays and inshore waters where fish and shellfish farming is practised around the Irish coast, as a further proactive step by fish and shellfish farmers, to encourage public consultation on their current operations and their future plans.

These areas include Roaring Water Bay, Lough Swilly, Clew Bay and Carlingford Lough.

Bays and inshore waters are a primary natural resource; their utilisation for the sustainable development of aquaculture requires a dynamic and evolving management system.

The logical management approach is a locally based and all embracing system designed to maximise production and environmental management through the integration of production goals with minimal conflict with other resource users. Southern Ireland has lead the way in the development of such a unique and progressive approach to bay/inshore waters management.



CLAMS incorporates the concepts of SBM and an aquaculture development plan for each lough. CLAMS is rooted in the principles of Integrated Coastal Zone Management (ICZM).

This is a constantly evolving process in which a co-ordinated strategy is developed and implemented for the allocation of environmental, socio-cultural and institutional resources to achieve conservation and sustainable multiple use of the coast.



### **What does CLAMS do?**

Because CLAMS is designed to treat each lough as a separate entity, the process involves an individual plan being drawn up for each area. This management plan lays out clearly what fish and shellfish farmers are currently doing in the bay, how they operate and what their future plans are. The plan involves a long consultative process with many interested parties in the relevant area and includes:

- (1) A detailed description of the lough in terms of physical characteristics, history, aquaculture operations, future potential, problems etc.
- (2) The integration of a series of codes of practice for current aquaculture operations and translation of those generic codes to the specific circumstances of each lough.



- (3) The formation of a development plan for aquaculture in the bay.
- (4) The compilation of information on other activities in the bay.
- (5) The establishment of a local and national communication network with 'bottom up' and 'top down' dialogue capacity.



### **What is Single Bay Management (SBM)?**

The concept of SBM was first utilised in Scotland in the late 1980s. The strategy was put in place by a number of salmon farms in a sea loch on the West Coast of Scotland to deal with fish health problems.

As a management strategy it proved very successful and enabled farmers to control or in some cases to eradicate the health problems.

The idea was brought to Southern Ireland by salmon farmers and, with the encouragement of the Department of Communications, Marine and Natural Resources (DCMNR), was introduced progressively on a voluntary basis from 1992 to 1994.

Initially the implementation of SBM consisted of a move to single generation sites and the early harvest of two sea winter fish combined with effective lice treatments.



The exchange of information on fish health and relevant management practices was essential for the success of SBM, which is rooted in the creation of an integrated approach to management.

SBM was not designed to simply tackle one problem (eg sea lice); rather it has the potential to lead to improvements over a whole range of aquaculture issues.

It is a particularly useful tool in the control, and in some cases elimination, of disease. SBM signifies the gateway to more efficient production by optimising conditions within the bay and laying the foundations for co-operative ventures between hitherto 'rival' operators in the same bay.

The SBM process is essentially a subset of the greater CLAMS process. In dealing with SBM matters, the fish farmers in a bay look after internal day-to-day aquaculture management issues, whereas under the CLAMS banner, they look outwards to the other stakeholders in the bay.

## **Where did CLAMS come from?**

CLAMS was officially set up in 1998 in Southern Ireland by various farmers and fishermen and the DCMNR who asked Bord Iascaigh Mhara (BIM) and the Marine Institute (MI) to provide information on, or to help resolve, licensing or development issues at a local level. In 2001 the process was introduced to Carlingford Lough and administered by the Aquaculture Initiative.

While being involved in these processes, a considerable amount of conflict resolution was undertaken where groups or individuals had different views and as usual there were two sides (if not three) to every story. Fundamental to many of these problems was the fact that most of the aquaculture had developed on a case-by-case basis and apart from SBM agreements for salmon farms, there had been very little input at local level on how aquaculture should have developed in the area.

These initiatives developed the potential for an inclusive approach to the management of aquaculture operations at a local level. However, it became clear that in order to develop the full potential of this





management approach these initiatives needed to be integrated and set in a proper policy context.

CLAMS incorporates the best aspects and relevant information of previous work carried out as well as maintaining SBM in its structure.

But beyond this CLAMS incorporates the development plans of local individuals as well as integrating the management practices of the various species sectors that may be operating in the bay/region.

It is envisaged that by the end of 2006, every major fish farming area in the island of Ireland will have a completed CLAMS plan and an active local CLAMS group.

CLAMS allows for the successful integration of aquaculture into the coastal zone, taking cognisance of the need to improve environmental compliance, product quality and consumer confidence.

As part of its commitment to the sustainable development of the aquaculture industry, the CLAMS process facilitates the gathering and analysis of data in relation to fish and shellfish farming. This data is the made available to the local community.

## **What is Integrated Coastal Zone Management (ICZM)?**

As its name suggested Integrated Coastal Zone Management is a process of managing a coastal zone in an integrated and inclusive fashion for the environmental maintenance and economic sustainability of the specific area.

The European Commission list the following main principles which ICZM will feature:

- (1) Take a wide-ranging view of inter-related problems.
- (2) Base decision on good data and information.
- (3) Try to work with natural forces.



- (4) Allow for unforeseen developments.
- (5) Involve all stakeholders and all relevant parts of the administration.

In 2000, based on the experiences and outputs of the Demonstration Programme, the Commission adopted two documents:

- (1) A Communication from the Commission to the Council and the European Parliament on 'Integrated Coastal Zone Management: A Strategy for Europe' – 17th September 2000. The Communication explains how the Commission will be working to promote ICZM through the use of Community instruments and programmes.
- (2) A proposal for a European Parliament and Council Recommendation concerning the implementation of Integrated Coastal Zone Management in Europe, which was adopted by Council and Parliament in May 2002. It outlines steps that the Member States should take to develop national strategies for ICZM.

## **CLAMS and ICZM**

ICZM is fast becoming an applied legislative reality. The EU Recommendations outlines steps that the Member States should take to develop national strategies for ICZM. By the end of 2004 Northern Ireland should have developed its own ICZM Strategy.

## **What CLAMS is not**

CLAMS is not a licensing or regulatory process. This function is vested on a statutory basis with the Department of Agriculture and Rural Development and the Coastal Zone Administration section of the DCMNR. It provides a policy backdrop that helps in the formation of a detailed evaluation of individual licence conditions. CLAMS can inform those tasked with compliance monitoring with regard to general issues such as bay carrying capacity, but cannot be used on an individual basis.



## Administration of CLAMS

The CLAMS Executive Committee will oversee the implementation and administration of CLAMS by the Aquaculture Initiative (EEIG). The Committee may invite individuals or organisations with specific knowledge of a particular bay to attend oversight meetings.

## Geographic Information System (GIS)

Central to the proper running and implementation of CLAMS has been the Geographic Information System (GIS) database run by BIM's Aquaculture Development Division and that housed in DARD. This GIS database contains detailed production and licence information, which can be downloaded for each area. Locally additional relevant positional and technical data has been recorded and the position of aquaculture structures verified.



## Establishing the CLAMS process

The CLAMS process is established through a number of steps:

- (1) The aquaculture producers in an area make a request to the Oversight CLAMS Group to initiate the CLAMS process in their area.
- (2) A specific area must be defined.



- (3) DCMNR and DARD are consulted on the relevant policy and licensing issues for the area.
- (4) Then the relevant information on existing production and licensing is downloaded from the GIS database. Additional relevant positional data is inputted and locations verified etc.
- (5) All existing producers operating in the area are then consulted with individually to discuss CLAMS.
- (6) In each locality third parties are consulted for input into the CLAMS. These include DCMNR engineers and area officers, DARD Fisheries Inspectorate, Loughs Agency, BIM/Taighde Mara Teo area officers, Regional Fisheries Boards, potential new entrants, fishing co-ops, councils, regional development bodies etc, harbour authorities and any other relevant parties.
- (7) An agenda is then prepared to address the major issues raised in preliminary meetings.
- (8) A CLAMS group is then officially formed in the area with an initial meeting including all producers and co-ordinators as well as relevant regional BIM, DARD, DCMNR and Loughs Agency personnel to discuss the summary of major issues and to outline a development strategy.
- (9) A local liaison officer is then appointed.
- (10) A work group is then agreed upon to deal with the matters relating to proper management of the bay.
- (11) An initial CLAMS document is then drafted and circulated to all involved.
- (12) The group meets in order to discuss the document and proposed amendments to it.
- (13) A schedule of future meetings is set out in order to review issues on an ongoing basis and continually modify the CLAMS plan.





- (14) An information presentation on the plan is then made to relevant local bodies, councils and government agencies.
- (15) The CLAMS document is then launched and an interpretative sign placed in the bay to serve as an information point, for the local community and visitors, about aquaculture activities in the bay. Through text and photographs, the signs detail the development of aquaculture in the specific area as well as its history. The interpretative signs also detail other activities in the bay, such as inshore fishing and marine tourism.

### **What's in a CLAMS document?**

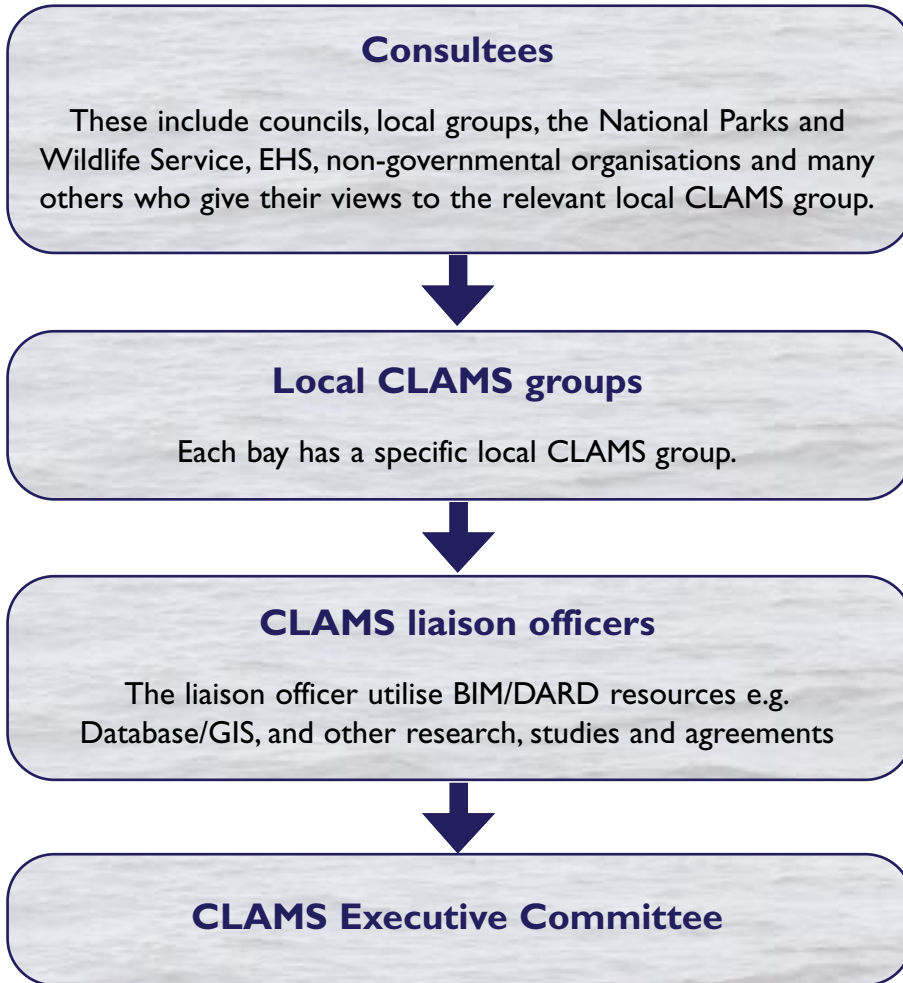
Each CLAMS document contains the following information:

- Baseline information. This is a collection of measurements, calculations, and other data that are used as a basis for compensation.
- The integration and local translation of codes of practice covering each species farmed in the area.
- The relevant details of the local CLAMS group and liaison officer.
- A list of future developments in order of priority.
- Details of potential areas for development.

The CLAMS documents are designed to be easily integrated into other development plans or other plans being developed for the management of Ireland and the UK's valuable coastal resource in particular ICZM.



## CLAMS Structure





## **CLAMS and the locality**

CLAMS is a management system founded on the basis of essential local participation. Representatives from the various companies and farms and the CLAMS facilitators form the CLAMS group.

The CLAMS groups are comprised of representatives of all bona fide aquaculture interests only. Eligible members include producers and their representatives (technical and association), liaison officers, BIM, DCMNR, DARD, Taighde Mara Teo, County and District Councils and MI.

In terms of consultation with parties not involved in aquaculture, these consultees are invited to meetings where they may express any concerns they might have. Though their comments will be heard, it is not policy to address all of their concerns in CLAMS.

It must be stressed that one of the main purposes of CLAMS is to provide a framework for the development of the industry and not a document that lists all objections to it. Where it fits into the scheme of things, the concerns of other sectors will be addressed in CLAMS.





CLAMS should incorporate a strategy to encourage further integration of associated activities ie fisheries, enhancement/management programmes (including river systems), marine tourism and angling etc.

The CLAMS group should form a focus or contact point for other local groups to contact. In this way it will be easier for aquaculture interests to be represented properly in things such as ICZM, County and District Council development plans and regional development.

Information on stock numbers, health status, origin etc will need to be provided by the parties to this agreement along with general future development plans.

The local CLAMS group should meet regularly to discuss issues and exchange relevant information. When the various local groups are established, regular meetings should be held with the local liaison officers.

## **LOCAL AQUACULTURE LIAISON OFFICERS**

You can contact your Local Aquaculture Liaison Officer through the following Aquaculture Initiative (EEIG) personnel:-

Michael Murphy: 0035342 9385074, [michaelfmurphy@oceanfree.net](mailto:michaelfmurphy@oceanfree.net)

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