



Rialtas na hÉireann
Government of Ireland



Arna chomhchistiú ag
an Aontas Eorpach

Co-Funded by the
European Union

Shellfish in Transitional & Coastal Waters

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Regional Development Manager

Shellfish growing in transitional and coastal waters

- Set the scene
- Impact of water quality
- Moving the dial





Total Employed

1,425

Total FTE

808





Total Value
€64M

Total Tonnes
23,231





Food Safety

National Monitoring Programme:

All shellfish growers work under stringent conditions set out under the Microbiological Monitoring of Live Bivalve Mollusc Production Areas. Classification of Shellfish production dictates if it's Class A, B or C area and what actions they must take before they can place the food on the market. SFPA

Norovirus is monitored and producers follow guidance on managing the risks and complying with regulation prohibiting placing food on the market if it is unsafe. MI and BIM funded initiative assisting oyster packers group.

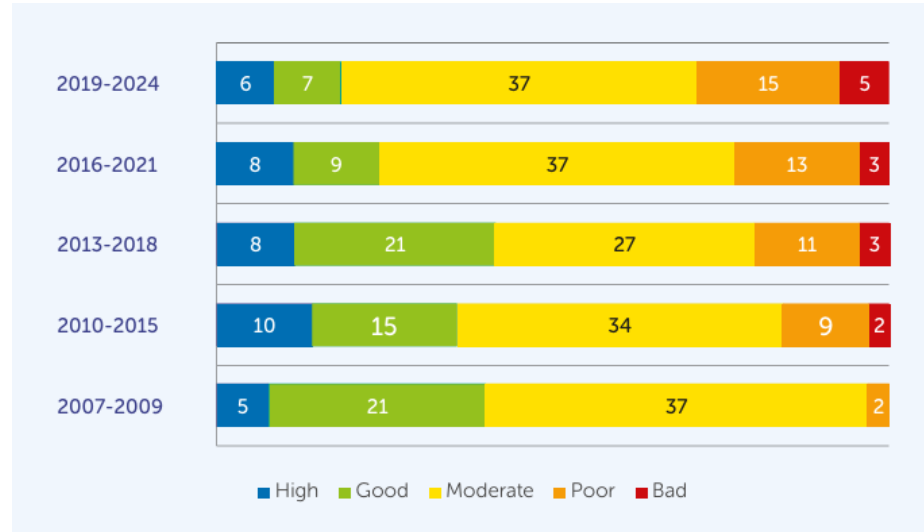
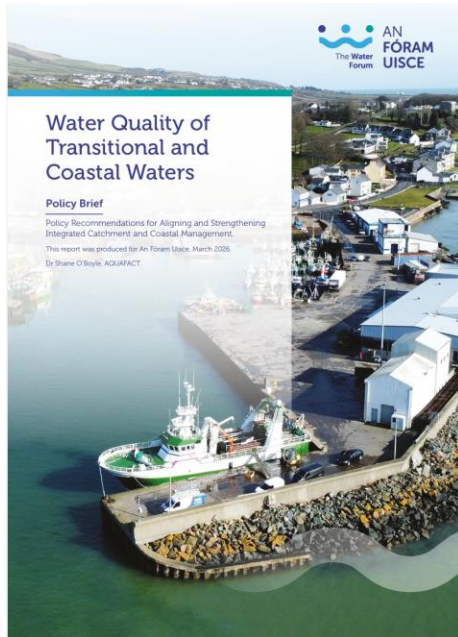
National Shellfish Monitoring Programme (Biotoxins & HABs) specifies whether an area is open or not for harvest. MI



They are vigilant



Confession Boxes



Co-ordinated Local Aquaculture Management Systems

Castlemaine Harbour Kerry

Carlingford Lough Louth

Clew Bay & Achill Mayo

Roaringwater Bay Cork

Killary Fjord Galway



Participation in Water Quality Information Sessions

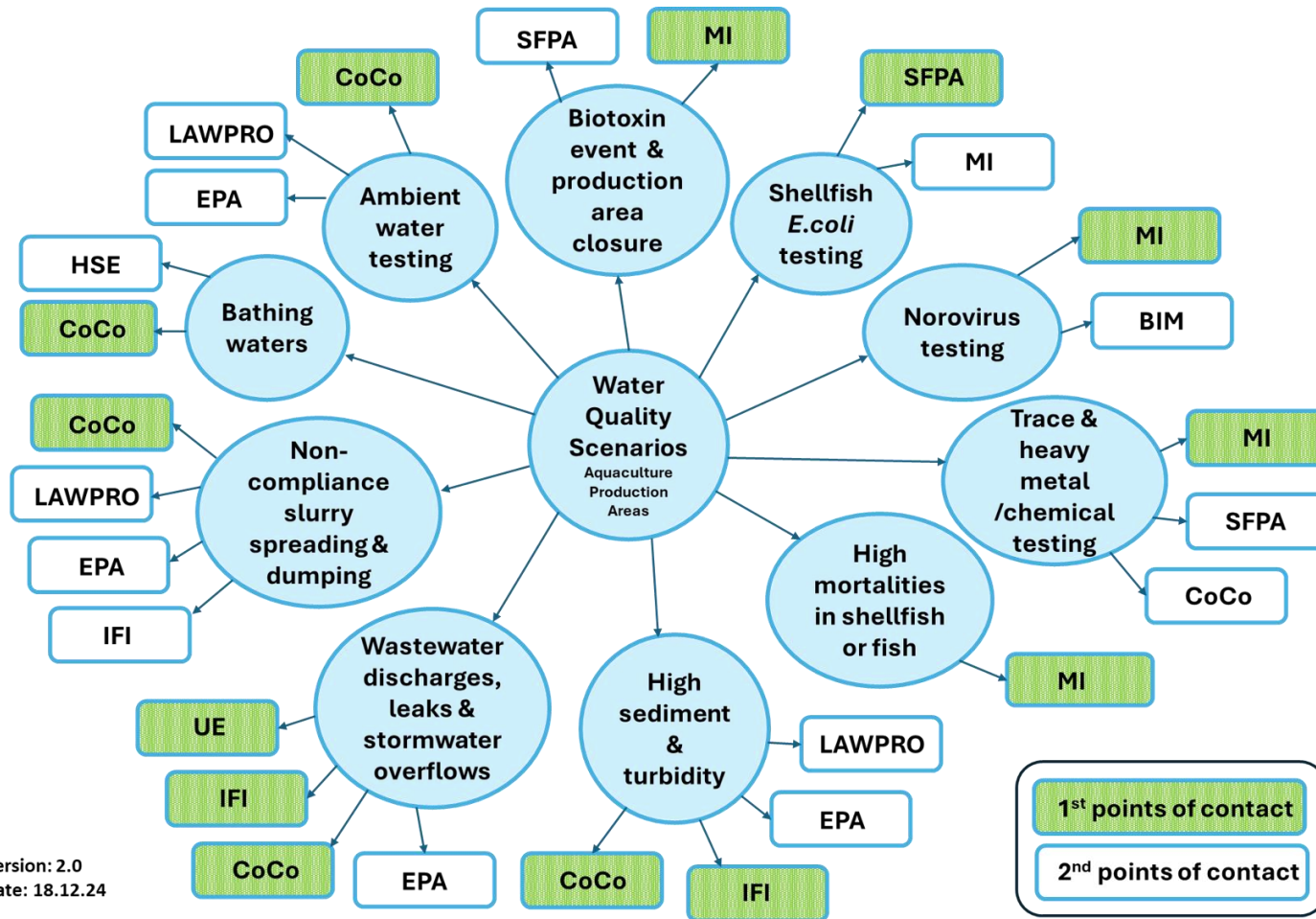


Comhairle Contae Chorcaí
Cork County Council



NPWS
An tSeirbhís Páirceanna
Náisiúnta agus Fiadhúlra
National Parks and Wildlife
Service





Lessons we've learned

Communicate

Collaborate

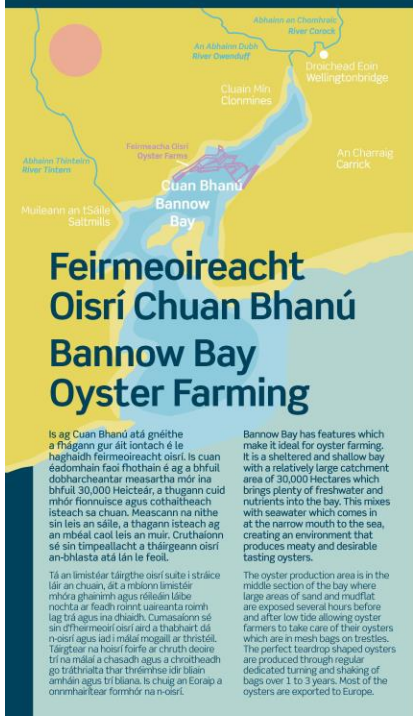
Collect data

Co-operate

Communicate & Collaborate



Communicate & Collaborate



Tairbhí don Gheilleagar Áitiúil **Benefits to the Local Economy**

Tá feirmeoireacht oisrí i gcoilár an tÁirgthe inbhuanaithe bia mara sa limistéar, agus déanann sí rannchuidiú mór leis an ngeilleagar áitiúil.

Benefits to the Local Economy

Oyster farming is at the heart of sustainable seafood production in the area and makes a significant contribution to the local economy.

17 
lánaimseartha
Meánfhostaíocht
full time
Average Employment

€2.48 
milliún
 Meánláimhdeachas
million
 Average Turnover

468
dtona
Meántáirgeadh
tonnes
Average Production

Ón mbliain | Since
1614

Athsheachadadh oisrí ó Milford Haven ar an taobh thiar de Chuan Bhanú in aice le Múleann an tSáile thart ar an mbéain 1614.

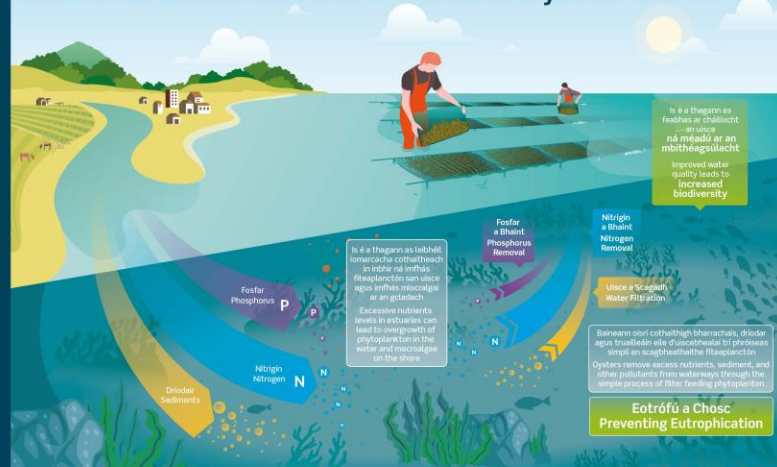
Oysters from Milford Haven were relayed on the western side of Bannow Bay near Saltmills circa 1614.

 < 5% 

Tá thart ar 51.5 Hectear (5% de limistéar an Chuain) sa limistéar a chumhdáiltear le ceadúnais láithreán oisrl. Tá níos lú ná 1% de limistéar an chuain faoi bhun tristéil, áfach.

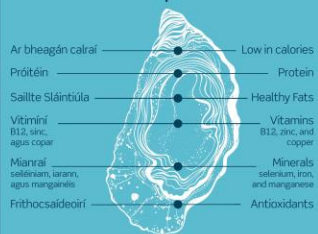
The area covered by oyster site licences is approximately 51.5 Hectares (5% of Bay area). However, less than 1% of the bay area is underneath trestles.

Tairbhí don Éiceachóras | Benefits to the Ecosystem



Sláinte & Cothú

Is foinse iomlán phróitéine iad oisrí. Tá gach ceann de na naoi n-aimínaigéad riachtanacha iontu, agus tá siad lán le cothaitheigh.



Health & Nutrition

Oysters are a complete protein source, including all nine essential amino acids and are packed with nutrients.

Ísealcharbón | Low Carbon

Tá lorg an-íseal carbóin ag feirmeoireacht oisrí. Fágann sé sin i dtéannta na seirbhísí éiceachórais a bhaineann léi (nitrigin agus fosfar a bhaint), gur bia saothraithe ísealcarbóin atá cothaitheach agus inbhuanaithe iad oisrí.

Oyster farming has a very low carbon footprint which combined with the ecosystem services (removal of nitrogen and phosphorous) makes it a low carbon, nutritious, sustainable farmed food.



CLAMS
Co-ordinated Local Aquaculture
Management Systems



Táirgeann feirmeoireacht oisrí bia ísealcharbóin a sholáthraíonn tairbhí dár ngeilleagar áitiúil agus dár gcomhshaol áitiúil.

Oyster farming produces low carbon food that has benefits for our local economy and environment.

Le tacaíocht ó | Supported by

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Government of Ireland

Anna Chomichová
an Aontas Eorpach
Co-funded by the



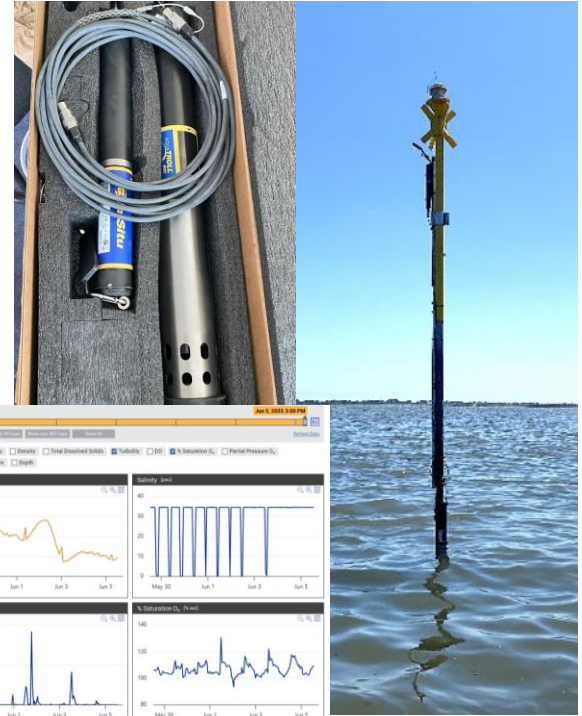
Collecting Data

Aqua Troll 800 data sondes measuring and broadcasting:

- Temperature (Air and Water)
- Atmospheric Pressure
- Emersion/Immersion
- Depth of water
- Conductivity/Salinity
- Chlorophyll a (RFU's)
- Turbidity
- Oxygen

Located in Mulroy, Killary, Poulnasherry, Roaringwater, Dungarvan, Carlingford with further deployments planned in Clew Bay and the southeast.

Weather stations in Carlingford and Dungarvan



Co-operation

- Downgrading of classification results to a “C” class
- Meeting of the CLAMS group - they used local knowledge to identify potential source receptor pathways.
- A sampling programme commenced.
- Problem sources were identified allowing Wexford Co. Co., LAWPro and ASSAP to target mitigation and try to reduce the risk to acceptable levels.



Co-operation

When things go wrong....

- High mortality 60% to 80% 2024 and 2025
- No definitive indication of cause
- Possibly multifactorial
- CLAMS Group requested interagency response to investigate

Sampling programme

Marine Institute & BIM in co-operation with industry across sentinel sites in the bay and a control site.

- Histopathology,
- Biomarkers (in association with TU Dublin)
- Condition index & mortality
- Phytoplankton
- E. Coli in the bay and in rivers, streams, drains
- Surfactants and nutrients inc. nitrate, nitrite, ammonia, silicates,
- Xenobiotics in water, in oysters and in sediment.
- Data sondes measuring physio chemical parameters Brevio and Aqua Troll,
- Physio chemical profile of the bay
- General environmental observations e.g. algal cover, larval settlement recorded on an App

Waterford County Council, LAWPRO, EPA, Uisce Eireann, SFPA have provided data and are actively involved in the steering group together with DAFM.

- Communication and flow of information
- Local knowledge to identify source receptor pathways
- Collection of data
- Targeted action

Acknowledgements

- CLAMS Groups Shellfish growers around the coast
- BIM colleagues Brian O'Loan, Gary McCoy, Mary Hannan, Martin Flanigan, Pete Donlon, Louise Collins, Vicky Lyons, Nicolas Chopin
- Colleagues in Marine Institute, SFPA, IFA Aquaculture, EPA, LAWPRO(@ROCs), Local Authorities and Uisce Éireann

Thank you for listening

www.bim.ie