

APPEAL OF AQUACULTURE LICENCE DECISION

TO:

Aquaculture Licences Appeals Board (ALAB)
Kilminchy Court
Dublin Road
Portlaoise
Co. Laois
R32 DTW5



RE: Appeal of Aquaculture Licence Decision (T05-472A), Kinsale Harbour, Co. Cork — Woodstown Bay Shellfish Ltd

DATE: 23/06/2025

FROM: David and Meta Tucker

EXECUTIVE SUMMARY

We are writing to formally appeal the decision to grant aquaculture licence T05-472A to Woodstown Bay Shellfish Limited for bottom-culture mussel farming on a 23.1626-hectare site in Kinsale Harbour, Co. Cork. This appeal is based on serious scientific, legal, and procedural deficiencies in the decision-making process that fail to protect Ireland's marine environment adequately, comply with EU environmental legislation, and safeguard the sustainable economic development of the region.

DETAILED GROUNDS FOR APPEAL

1. CATASTROPHIC FAILURE TO ASSESS INVASIVE ALIEN SPECIES RISKS

Critical Marine Ecological Concern

The licence determination contains no assessment of the risks associated with the introduction of invasive alien species (IAS), representing a fundamental breach of both the EU Regulation on Invasive Alien Species (1143/2014) and the Marine Strategy Framework Directive. Aquaculture operations are globally recognised as primary vectors for marine biological invasions, with bottom-culture mussel farming presenting particularly high risks through:

Primary Introduction Pathways:

- **Seed mussel transportation** from external sources carrying hitchhiker species
- **Equipment fouling** during deployment and maintenance operations
- **Vessel hull fouling** from support boats operating across different water bodies
- **Ballast water discharge** from transport vessels



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High-Risk Species of Immediate Concern:

- *Crepidula fornicata* (American Slipper Limpet) - already established in nearby Cork Harbour
- *Didemnum vexillum* (Carpet Sea Squirt) - rapid coloniser of aquaculture infrastructure
- *Styela clava* (Leathery Sea Squirt) - forms dense colonies on mussel lines
- *Codium fragile* (Dead Man's Fingers seaweed) - smothers native benthic communities

Ecological Impact Amplification: The proposed site's location in a semi-enclosed harbour creates ideal conditions for IAS establishment and secondary spread. Kinsale Harbour's unique position as both a recreational marina hub and a connection point to the open Atlantic waters makes it a critical gateway for invasion. Once established, invasive species spread rapidly through natural dispersal mechanisms, potentially reaching the nearby Old Head of Kinsale SAC and Sovereign Islands SPA.

Legal Non-Compliance: Article 13 of EU Regulation 1143/2014 requires Member States to establish surveillance systems and take immediate action to prevent IAS introduction. The complete absence of any biosecurity assessment or mitigation measures in this licence represents a serious breach of EU law.

2. DESTRUCTION OF PRIORITY SEAGRASS HABITATS

Recent Scientific Discovery Dr Robert Wilkes' comprehensive national seagrass mapping programme (University College Cork, 2023-2024) has identified potential *Zostera* beds within Kinsale Harbour. This discovery fundamentally alters the environmental assessment baseline, as seagrass habitats were recently photographed by members of Cork Sub Aqua Club divers and other Nursery and Biodiversity are:

- **Priority habitats** under Annex I of the EU Habitats Directive
- **Blue carbon ecosystems** storing up to 35% more carbon per unit area than tropical rainforests
- **Critical nursery areas** supporting juvenile fish populations essential for regional fisheries
- **Biodiversity hotspots** supporting endangered species including seahorses (*Hippocampus*)

Dredging Impact Severity: Bottom-culture mussel farming requires intensive dredging for both establishment and harvesting. Scientific literature demonstrates that dredging causes:

- Complete destruction of seagrass root systems
- Chronic sediment resuspension preventing photosynthesis
- Elimination of associated fauna communities
- Carbon release equivalent to forest clearing

Recovery Impossibility: Seagrass restoration success rates remain below 35% globally, with most attempts failing within five years. The dynamic tidal conditions and

sediment mobility in Kinsale Harbour make natural or assisted recovery extremely unlikely.

3. BREACH OF NATURA 2000 INTEGRITY OBLIGATIONS

Article 6(3) Assessment Failure Despite the site's proximity to multiple Natura 2000 sites, no Appropriate Assessment has been conducted. The designated sites at risk include:

Old Head of Kinsale SAC (IE0000532):

- Distance: <2km from proposed site
- Qualifying habitats: Sea cliffs, vegetated sea cliffs
- Connectivity: Direct water column and benthic connections
- Impact pathway: Water quality degradation, organic enrichment

Sovereign Islands SPA (IE0004124):

- Qualifying species: Cormorant populations dependent on fish from Kinsale Harbour
- Impact pathway: Prey depletion through habitat modification

Cumulative Effects Ignored: The determination fails to consider cumulative impacts from existing port activities, climate change effects, and potential future aquaculture developments. This represents a fundamental breach of the precautionary principle.

4. ARCHAEOLOGICAL HERITAGE DESTRUCTION RISK

Submerged Cultural Landscape The proposed site lies within one of Ireland's most significant maritime archaeological zones:

James Fort National Monument (NIAH 20911215):

- 17th-century star fort with direct sightlines to proposed site
- Associated maritime infrastructure likely extends offshore
- Cannon positions oriented toward licence area

Potential Archaeological Material:

- Civil War-era blockhouse remains (1920s)
- Historic anchorage features and mooring stones
- Shipwreck material from centuries of maritime activity
- Military infrastructure related to fort operations

Legal Breach: No underwater archaeological assessment has been conducted, violating the National Monuments Act 2004 and UNESCO Convention on Underwater Cultural Heritage principles.

5. MARINE NAVIGATION SAFETY HAZARDS

Mussel Larvae Fouling Risk *Mytilus edulis* produces up to 1 million planktonic larvae per spawning female. These microscopic veligers present serious operational hazards:

Raw Water System Colonisation:

- Engine cooling system blockages leading to catastrophic overheating
- Generator cooling failure in auxiliary systems
- Desalination plant membrane fouling
- Fire suppression system compromise

Vessel Categories at Risk:

- Recreational sailing fleet (200+ vessels regularly using Kinsale)
- Commercial fishing vessels
- RNLI rescue boats
- Naval service patrol vessels
- Superyacht traffic (significant economic sector)

Emergency Response Implications: System failures increase maritime emergency callouts, straining RNLI resources and endangering lives. No consultation with emergency services is documented.

6. ECONOMIC IMPACT ON ESTABLISHED INDUSTRIES

Tourism Sector Damage: Kinsale's marine tourism generates approximately €45 million annually through:

- International sailing events and regattas
- Recreational angling (wreck and reef fishing)
- Whale and dolphin watching
- Marine photography and diving tourism

Visual Impact Assessment Absent: Industrial aquaculture infrastructure fundamentally alters the seascape character that underpins Kinsale's tourism brand. No landscape/seascape impact assessment has been conducted.

Traditional Fisheries Displacement: The area supports important:

- Crab and lobster pot fisheries
- Recreational angling access
- Traditional seine netting areas

7. PROCEDURAL FAILURES AND STATUTORY BREACHES

Excessive Delay (7.5 Years): The application timeline (December 2018 - May 2025) represents:

- Fundamental procedural unfairness to objectors
- Reliance on obsolete environmental data
- Changed baseline conditions (climate, species distributions)
- Breach of legitimate expectation for timely decisions
- From Submission AGR 00141-24: Appropriate Assessment Screening Determination for Refs. T05-472A etc there were 16 submissions in the Department between 16/2/2024 13:59 to 11/04/2024 14:39 when APPROVED by the Minister. WHERE HAS IT BEEN between then and May 2025 ?

Consultation Deficiencies: No evidence of meaningful consultation with:

- Marine recreational users

- Tourism industry representatives
- Archaeological specialists
- Marine conservation organisations
- Emergency services

8. CLIMATE CHANGE VULNERABILITY IGNORED

Ocean Acidification Impacts: Rising CO₂ levels are already affecting shell formation in bivalves. The licence fails to consider:

- Reduced calcification rates under future pH conditions
- Increased susceptibility to shell dissolution
- Economic viability under climate scenarios

Temperature Stress: Marine heatwaves are increasing in frequency and intensity in Irish waters. No assessment of temperature tolerance limits or adaptation strategies is provided.

SPECIFIC RELIEF SOUGHT

The Appellant respectfully requests that the Aquaculture Licences Appeals Board:

1. **REVOKE** the aquaculture licence T05-472A pending comprehensive environmental assessment
2. **ORDER** a full Environmental Impact Assessment including:
 - Invasive alien species risk assessment and biosecurity protocol
 - Updated seagrass habitat survey by qualified marine botanists
 - Benthic community assessment using standardised sampling protocols
 - Water quality impact modelling under multiple scenarios
3. **REQUIRE** Appropriate Assessment under Article 6(3) of the Habitats Directive for all Natura 2000 sites within 15km
4. **MANDATE** underwater archaeological survey by qualified maritime archaeologists in consultation with the Underwater Archaeology Unit
5. **COMMISSION** Marine Navigation Impact Assessment involving all relevant maritime authorities
6. **CONDUCT** comprehensive economic impact assessment including tourism, recreational, and traditional fishing sectors
7. **ESTABLISH** mandatory biosecurity protocols including:
 - Seed mussel source certification
 - Equipment disinfection procedures
 - IAS monitoring programme
 - Rapid response protocols

CONCLUSION

The decision to grant this licence represents multiple serious breaches of environmental law, inadequate scientific assessment, and procedural failures that collectively render it legally unsound. The potential for irreversible damage to priority marine habitats, archaeological heritage, and established economic sectors demands immediate intervention.

The precautionary principle, enshrined in EU environmental law, requires that where scientific uncertainty exists about potential serious or irreversible harm, protective measures must be taken. The numerous knowledge gaps and risk factors identified in this appeal clearly trigger this principle.

Ireland's marine environment is a shared heritage requiring protection for current and future generations. The hasty approval of this inadequately assessed development, albeit in the latter part of April 2024, but not made public until 1 year later – See Para 7 above, would set a dangerous precedent for coastal zone management nationwide. we respectfully urge the Appeals Board to revoke this licence and require comprehensive assessment before any aquaculture development proceeds in this environmentally sensitive location.

SUPPORTING DOCUMENTATION:

- Original licence determination
- Seagrass habitat mapping data (Dr R. Wilkes, UCC)
- Navigation charts showing vessel traffic patterns
- Archaeological site records (NIAH)
- EU species distribution databases
- Climate change impact projections for Irish waters

FEE ENCLOSED: €225 (€150 appeal + €75 oral hearing)

DELIVERY METHOD: Registered post

Respectfully submitted,

