



Adi
ASSOCIATES



EIA Update: Conversion of Temporary Tuna Farm to Permanent Facility

PA/05908/23 & EA/00007/18

Proposed conversion from a temporary to a permanent tuna farming area as established in PA 2175/18; to setup the North Aquaculture Zone (NAZ) intended exclusively for tuna farming

Department of Fisheries & Aquaculture

Introduction

- Purpose: Present updated Environmental Impact Assessment findings
- Project Proponent: Department of Fisheries and Aquaculture (DFA)
- Operator: AJD Tuna Ltd
- Original Permit: PA/02175/18 (Approved in 2019)

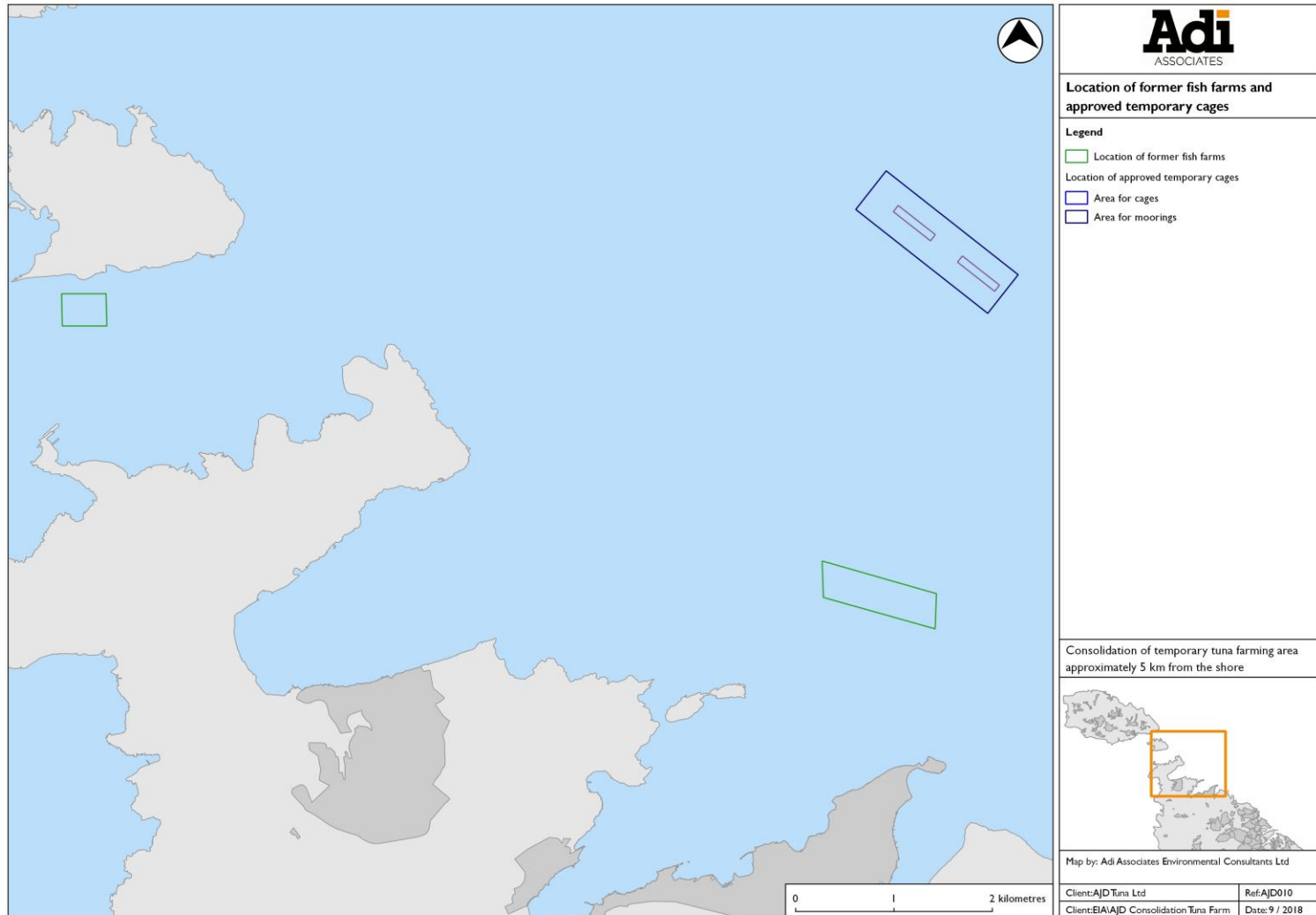
Background

- Site: 5 km offshore northeast Malta
- Biomass: 3,300 tonnes (no change)
- Previous relocation: From St Paul's Bay & South Comino Channel
- Status: Transition from temporary to permanent

Planning Background

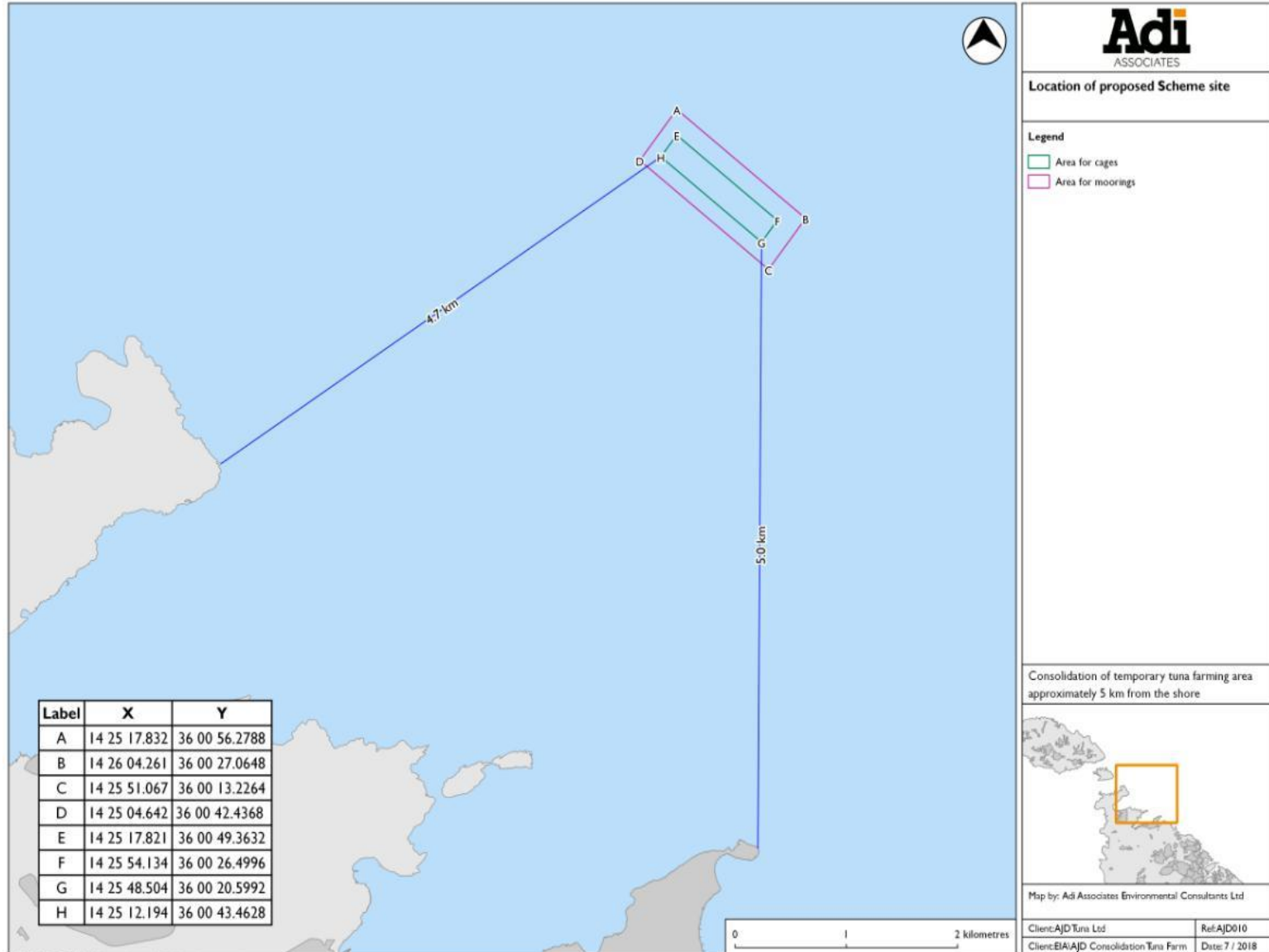
- AJD Tuna Ltd & Malta Mariculture Ltd operated two tuna penning sites, respectively at St Paul's Bay (since 1999) and South Comino Channel (since 2001).
- Both permits were revoked by PA in Sep 2016 following fish slime outbreak but allowed to relocate to Aquaculture Zones
- In 2017, AJD & MML applied to relocate the penning operation to a new temporary location around 5 km offshore until a new North Aquaculture Zone is set up by the Department of Fisheries

Farm locations



INDICATIVE ONLY - Not to be used for direct interpretation

Scheme location



Purpose of the Scheme

- Improve the long-term operational sustainability
- Convert the temporary facility into a permanent one
- No change in location, number of cages or biomass
- Set up the North Aquaculture Zone at the Scheme site (exclusively for tuna farming)

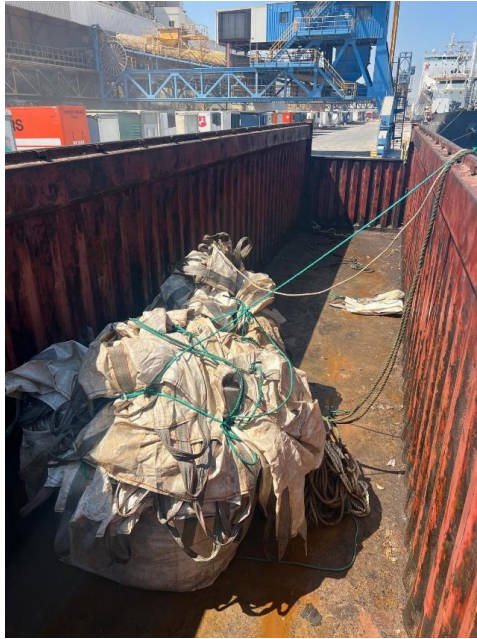
EIA Process

- Governed by EIA Regulations
- EIA Update required due to long-term status change
- Areas assessed as part of EIA process:
 - Seabed
 - Water quality
 - Natura 2000 impacts
 - Seabirds

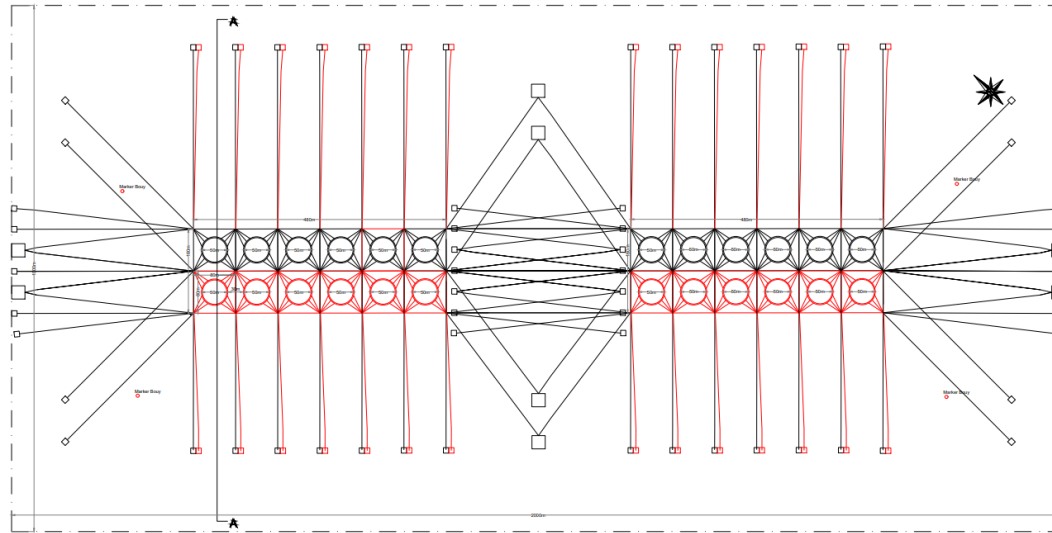


Key Components of Operation

- 24 Tuna cages (avg. 1,200 fish per cage; 138T)
- Total biomass: 3,300 tonnes
- Feed: Frozen baitfish (sardines, mackerel, etc.)
- Harvesting: Manual, on demand
- Processing: At sea and on land
- Waste management: Offal, oily slicks, feed residues



Cage layout



Proposed Plan - Permanent Tuna Farm

METRES: 0 50 100 150 200 250 300 350
SCALE: 1:2000

Legend
■ Construction Proposed
■ Construction Proposed
■ In Construction - To Be Deleted
■ Approved but not Constructed

Notes
1. This drawing is for information only and does not constitute a contract. It is subject to the terms and conditions of the contract. The client is responsible for providing all necessary information and data. The architect is not responsible for any errors or omissions in this drawing. The client is responsible for obtaining all necessary permits and approvals from the relevant authorities.



ARCHITECT
RAY SAMMUT & Associates
ARCHITECTS & CIVIL ENGINEERS
B.E. & A. (Hons), A. & C.E.
No. 4, Tarxien Street, 12, St. James, Malta
Mob: (356) 99614788 | (356) 9994542
E: r.sammut02@gmail.com
r.sammut02@gmail.com
www.raysammut.com

JOB TITLE
TUNA FARM OFF ST PAUL'S BAY
DRAWING TITLE
PLANS
CLIENT
D.G. Blom Cellus sro
D.H. Ministry for Agriculture, Fisheries, Food
& Animal Rights
LOCATION
Site off Sikka i-Bajda,
Sikka i-Bajda, San Pawl il-Bahar

DATE	BY
15.07.2022	
NO. OF SHEETS	NO. OF SHEETS
1/2500	1/2500
AS	AS
DATE	DATE
N.S.	N.S.
NO. OF SHEETS	NO. OF SHEETS
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Baseline conditions

- Marine Benthos
 - Predominantly coarse mobile sediments with rhodolith beds
 - High diversity of microbenthic fauna
- Water Quality
 - Typical of pristine offshore waters
 - Low levels of total organic carbon (TOC), total suspended solids (TSS), total nitrogen, and total phosphorous

Key environmental impacts

- Marine Benthos
 - MAJOR: Placement of mooring blocks on seabed habitats (deployment)
 - MINOR to MAJOR: Settlement of uneaten feed and fish waste (operations)
- Water Quality
 - MINOR to MAJOR: Potential deterioration from nutrient loads, fish oils, and operational discharges



Monitoring results (2019-2023)

- Long-term data reviewed
- Slight increases in seabed enrichment
- Oil slick containment improved but not failproof
- No significant changes from baseline EIA – but risks would now be potentially long-term (due to permanent nature of the facility)

Analysis of mitigation measures from original EIA

Impact	Mitigation Measures	Implementation
Loss through burial under mooring blocks	Good practice approaches in deployment Optimise mooring design & layout	Yes – moorings outside rhodolith area (>50%) No reports of dragging
Settlement of uneaten feed & faeces on seabed	Optimise stocking density Lengthen fallowing period Improve feed management & monitoring (technologies) Prompt action to minimize overfeeding & loss of feed Staff training	Yes No overwintering in recent years Feed monitoring Environmental monitoring incl. video Annual staff training
Habitat disturbance from organic input	Good practice farm management Control stocking density	Stocking density controlled through ICCAT quotas
Attraction of species	Monitor colonization process & community structure changes	Yes – annual environmental reports
Increased human presence	Monitor human activities on site Implement EMS Regular monitoring of seabed to retrieve lost items Prohibit /control fishing in vicinity	EMS formulated Annual environmental monitoring incl. video No. Fishing is a regular occurrence
Alien species / disease introduction	Monitor for evidence of introductions and act accordingly	Yes – no such evidence to date

Impacts identified

- Marine Benthos
 - MINOR to NOT SIGNIFICANT impacts from fish wastes and uneaten feed
 - Presence of anthropogenic litter on the seabed
- Water Quality
 - No appreciable alteration in water quality
 - Values within expected ranges for offshore waters
- Sediments
 - Limited effects, with elevated levels of phosphorous within the allowable zone of effects

Other considerations

- Avifauna
 - Potential impacts from fish slime oiling and attraction to farms
- Human Populations
 - MAJOR impact: Fish slime occurrence and impacts on coastline and beaches
 - MAJOR impact on AFM firing range if cages remain within firing arc
- Navigational Safety
 - Maintained with proper charting and marking

Consultation Summary

- **Local Councils & NGOs:**
 - Concerns about fish slime reaching the coast
 - Impacts on sea birds
 - Need for better management practices
- **Transport Malta:**
 - No objection subject to safety conditions
- **Armed Forces of Malta:**
 - Insistence on moving cages outside of the firing arc
- **Malta Tourism Authority**
 - No objection if no other site available and does not move closer to shore; but requires better oversight and control on fish slime and research on the possibility of converting to artificial feed

- Feed management
 - Explore artificial feed options to reduce baitfish feeding and minimize slime production
- Marine litter
 - Strict measures to prevent loss of and to retrieve anthropogenic items from the seabed
- Seabird study
 - Conduct a study in the impacts of fish farms on seabird populations
- Early Warning system
 - Develop technology for early detection of fish slime



Alternatives considered

- Zero Option: Relocation or decommissioning
- Alternative Sites: North Aquaculture Zone under review
- Preferred Option: Retain current location with permanent status

Conclusions

- Minor to moderate long-term impacts if mitigation is maintained
- Environmental responsibility increases with permanence
- Monitoring and mitigation are crucial
- Long-term impacts are manageable and reversible with good operational practices

Recommendations

- Continue and expand seabed and water quality monitoring
- Explore artificial feed alternatives
- Strengthen enforcement on oil containment and waste management (incl. litter)
- Explore early warning systems
- Address seabird protection and biodiversity conservation
- Regular training and audits of EMS

Thank you for your attention and participation

All interventions made during this hearing will be reflected in the minutes (which will be uploaded on the ERA website: <https://era.org.mt/era-project/pa02175-18/>).

Any additional comments on the EIA and AA can be sent to ERA until
5th May 2025
on eia.malta@era.org.mt

Or by post to the EIA Team, ERA, Hexagon House, Spencer Hill, Marsa, MRS 1441, Malta.

