

Loch Bracadale

Pre-Application Screening

Presentation to Struan Community Council

KALY

August 2024



Founded in January 2022



Multi Disciplinary Team

Seaweed Farming / Marine Biology /
Finance and Investment / Creel Fishing

Vision

To create a vertically integrated seaweed farming
industry in Scotland

Mission

Cultivate Seaweed / Improve the Marine Environment /
Create tangible benefits to local Communities

KALY

- Engage with all Marine interests
- Science led - SAMS/Stirling University
- Loch Bay - Prototype/Research Farm
- Seaweed Protocol - SCFF
- Farming Partnership Model
- Farm Design - Kelp & Creel
- Local Marine Conservation Plan





Environmental benefits of seaweed farming

- Habitat for juvenile fish
- Improves marine biodiversity
- Absorbs CO₂ faster than rainforest
- Absorbs excess nitrates and phosphates
- Reduces need to wild harvest kelp
- Co-location benefits from fin fish farming

Kelp - What are the end-products?

Food and Beverage



Pharmaceutical and Health



Bioplastics and Packaging



Agricultural and Gardening



Household



Cosmetic and Skincare



Loch Bay Pilot Farm

- Prototype Farm
- Training
- Research & Development
- Farm Design testing
- Marine Data - real time
- Satellite Monitoring
- DNA Data Collection
- Seeding and Harvesting techniques

Centre of Excellence

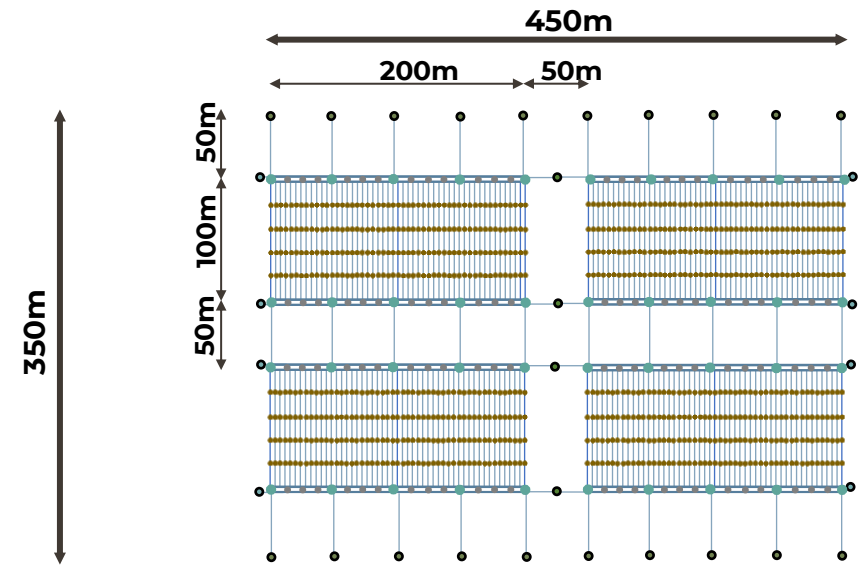


Loch Bay Grid Design

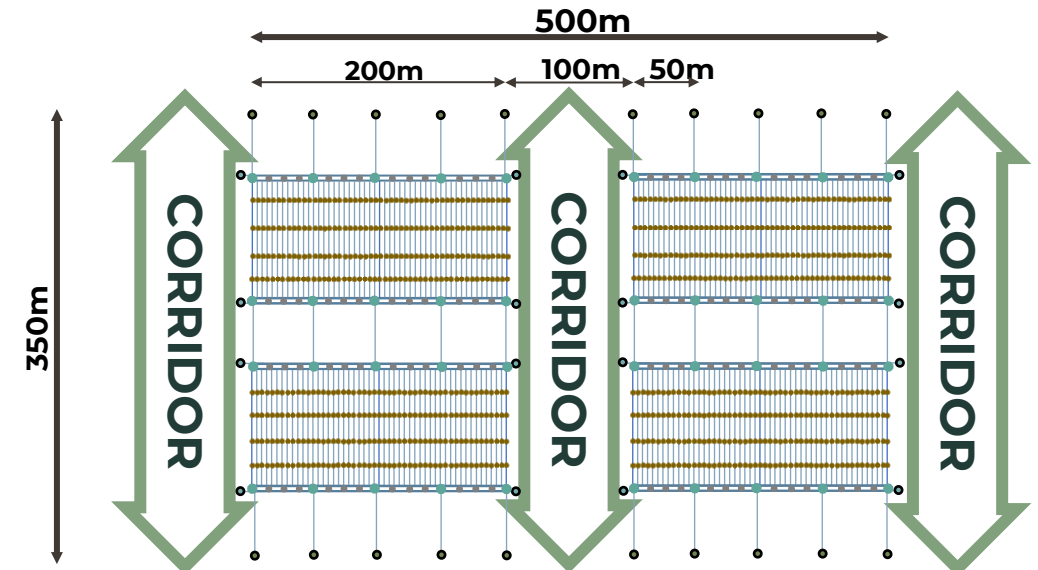
Integrated Kelp & Creel Model

- Seeding in Oct / Nov
- Harvesting in April / May
- 6 month Growing / 6 month Fishing
- Multi Trophic Aquaculture - oysters, mussels and clams


Standard 4 Grids Design

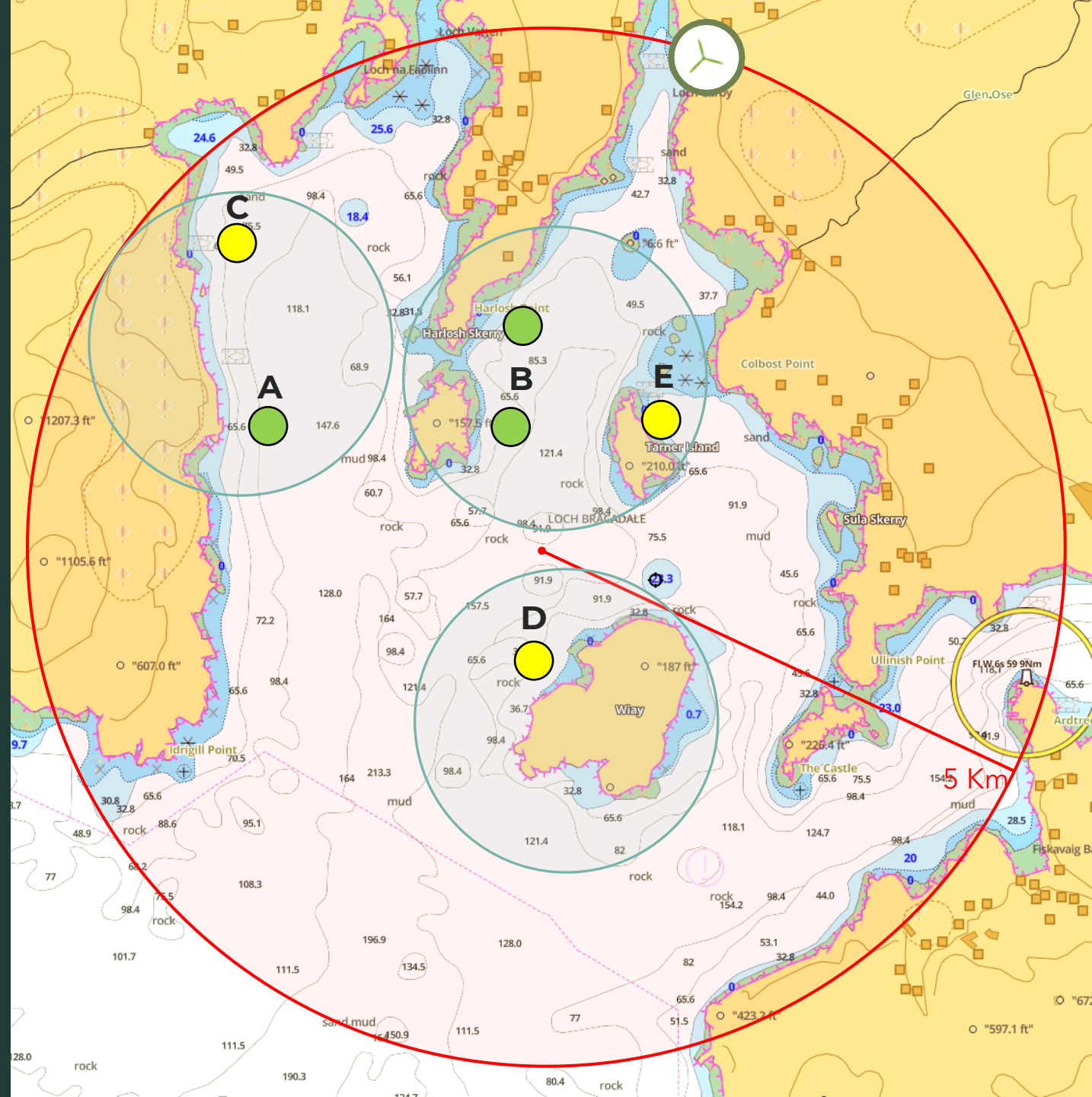


Kelp & Creel Integrated 4 Grids Design



Loch Bracadale Sites Screening

- **RED CIRCLE** - Scope of site screening
- **BLUE CIRCLE** - Potential site zones
- **SITE SCREENING:**
 - **Green** Few constraints
 - **Yellow** Moderate constraints
 - **Red** Significant constraints
- **SUGGESTED LOCATIONS: C - E**
- **ALTERNATIVE SITES: A & B**
-  **GLEN ULLINISH PROPOSAL**



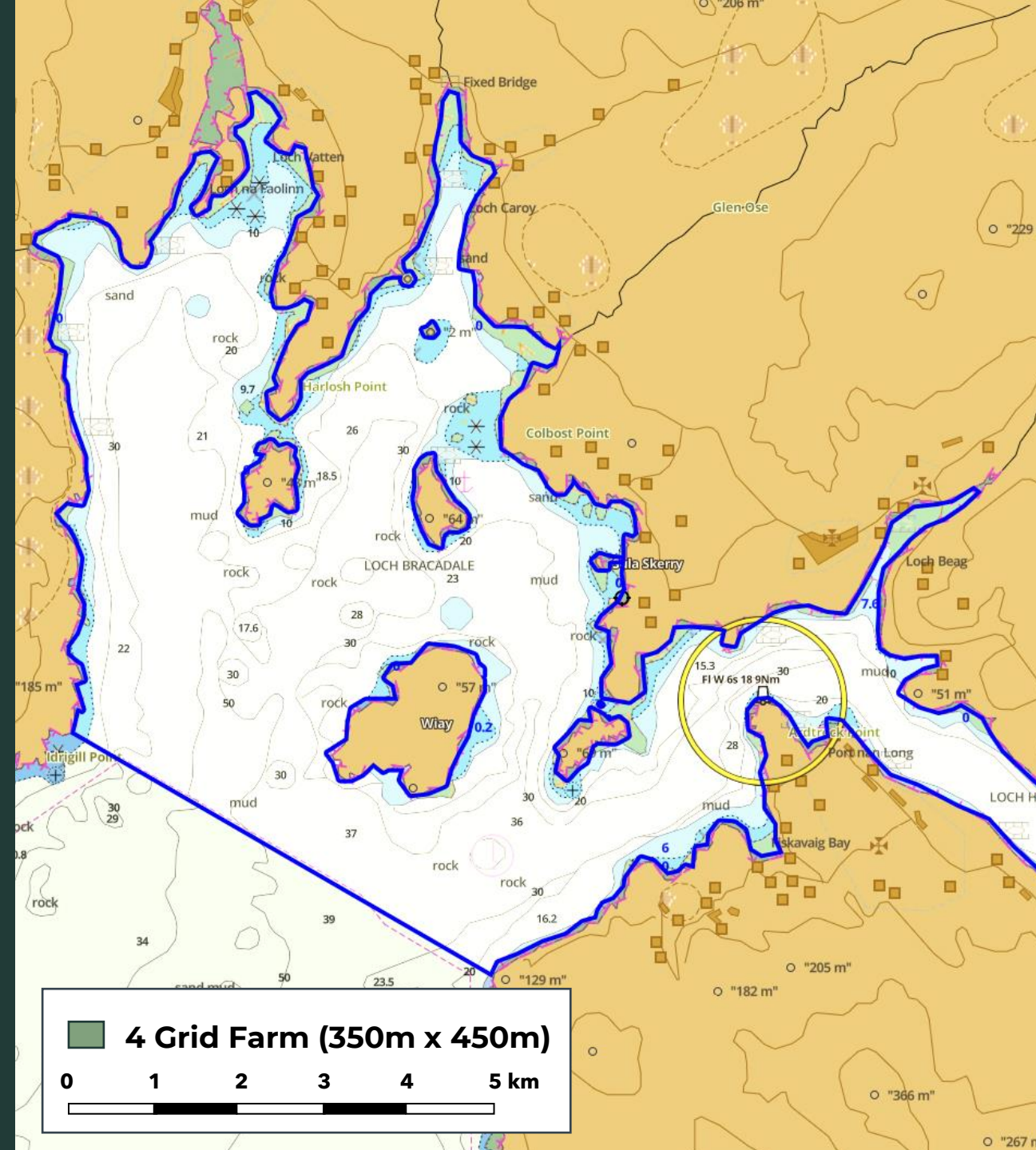
Loch Bracadale

“SPATIAL SQUEEZE” - emerging term from intensified marine usage

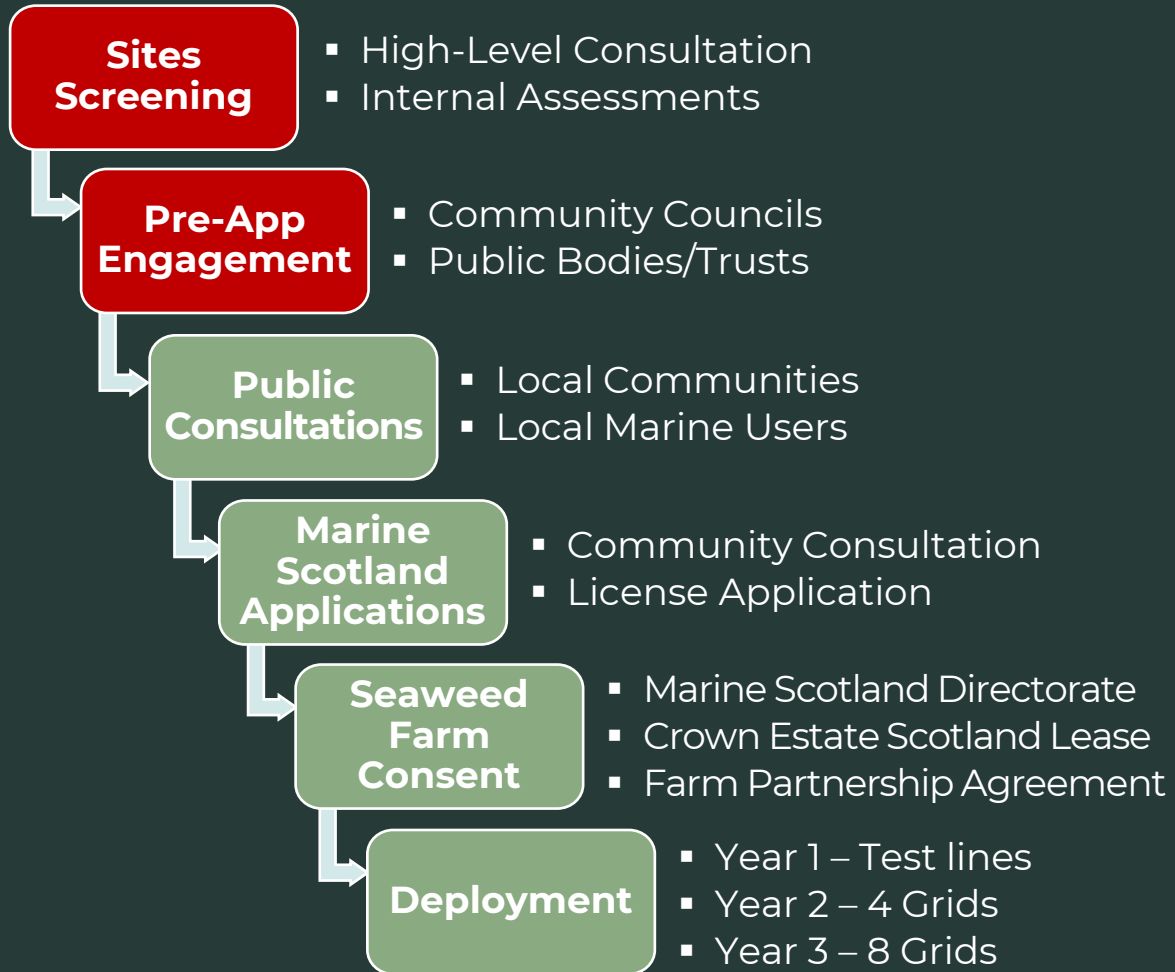
Loch Bracadale Area - 5,700 ha

KALY APPROACH

- Marine Data Collection
- Kelp Growing Trails
- Phase 1 - 4 Grids (0.28%)
- Phase 2 - 8 Grids (0.56%)



Timeline from Site Selection to Operation



Application Content

- Clear Supporting Plans and Charts
- Planning and Method Statements
- Pre-Application Consultation Report
- Navigational Risk Assessment
- Vessel Management Plan
- Environmental Report / Responsibilities
- Seascape and Visual Appraisal
- Habitat Assessments



Community Benefits

- Boost to local economy
- Job creation
- Training and New Careers
- Supplementary income
- Citizen Science
- Community Conservation Plan

Community Conservation Plan

- Biodiversity Improvement
- Lobster Hatchery
- Seagrass Restoration
- Reintroducing Native Oysters/Mussels
- Coastal Protection
- Marine Pollution Removal
- Local Environmental Plan



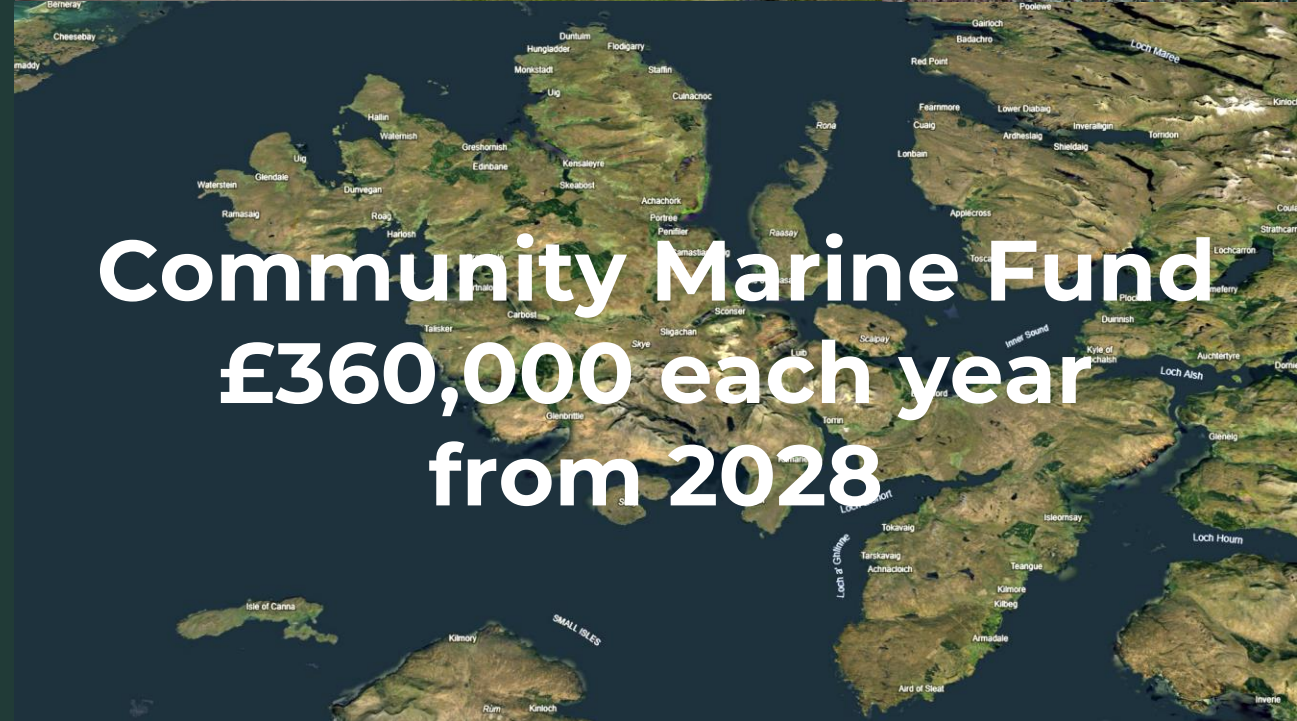
Lobster Hatchery



Improvement to Jetties and Piers



Collecting Data



Community Marine Fund
£360,000 each year
from 2028



Marine Debris Removal

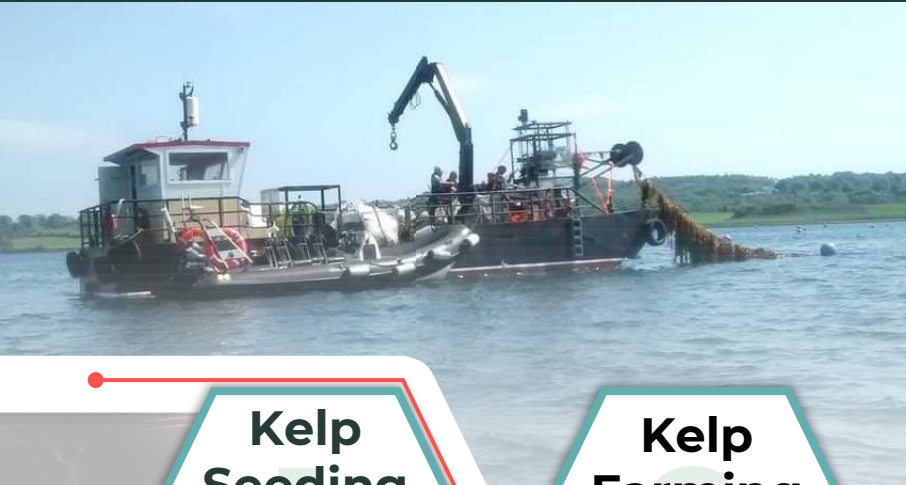


Education



Biodiversity Improvement

Vertically Integrated Business



Kelp Seeding & Breeding

Kelp Farming Partnerships

Kelp Stabilisation

Kelp Processing

Bio-refinery

Product Development



Vision - Marine Innovation Park for Scotland

Seaweed Hatchery



Biorefinery



Processing Facility



Community Farming



Breeding Compounds



We welcome
your comments

Thank You !

