

## WP4 – Space planning to foster aquaculture

ACTION 1 : IEF methodology transfer Presentation of each current situation about spatial planning

# **Country : Wales UK**







### Up to 4 million 'clearnerfish' – Wrasse and Lumpfish



#### Up to 8,000 tonnes of Mussels



#### Several RAS research facilities



Centuries old cockle industry







• Finfish aquaculture – rainbow trout and brown trout and land-based production of cleanerfish such as Wrasse and Lumpfish

(31 aquaculture production businesses (APBs) registered as finfish farms)

- Shellfish aquaculture marine production of blue mussel and Pacific oyster (10 mussel and oyster businesses)
- Small scale macroalgae and microalgae production
- RAS based research centres



### **Future project**



#### Welsh Marine and Fisheries Strategic Action Plan

The MFSAP for Wales (Welsh Government, 2013) aims to provide a framework for clean, healthy, safe, productive and biologically diverse seas. Specifically, the Marine and Fisheries Strategic Action Plan aims to safeguard environmental resources, use them as a driver for economic growth and help Wales fully develop a sustainable marine and fisheries industry.



Under construction 360 Aquaculture focused on Lumpfish, mussels and polychaetes (circa 2 mill)



Under conversion from Seabass MOWI (Marine Harvest) Target Wrasse

### Examples of spatial planning in Wales



Source. A Spatial Assessment of the Potential for Aquaculture in Welsh Waters. Welsh Government (May 2015)

#### A Spatial Assessment of the Potential for Aquaculture in Welsh Waters. Welsh Government (May 2015)



opportunity for potential future marine aquaculture developments over the next 20 years (i.e. up to 2035) through development of a spatial model.

- Natural resource constraints (e.g. water depth, substratum, temperature etc.)
- Marine Spatial Planning (MSP) constraints (e.g. nature conservation designated sites, areas o fother marine industry activity, infrastructure and exclusion zones, recreational activity etc.)
- Investment-dependent constraints (e.g. proximity to landing ports, depuration facilities, and invasive non-native species (INNS)).



#### Legend

C	Coarse fish
тт	Table-trout
TR	Trout-restocking
тн	Trout/salmon hatchery
OY	Oysters
м	Mussels
SF	Shellfish (Other)

### Outputs from the special planning model

- Medium potential for expansion of shellfish industry with increasing potential the further off shore
- High potential for macroalgae production
- High potential and area for cage aquaculture specifically Seatrout and Salmon but water temperatures too high in summer (Cage modification)
- High potential for land based aquaculture (good infrastructure, land cost, technological support)