



# Sea grass ID and monitoring with local volunteers

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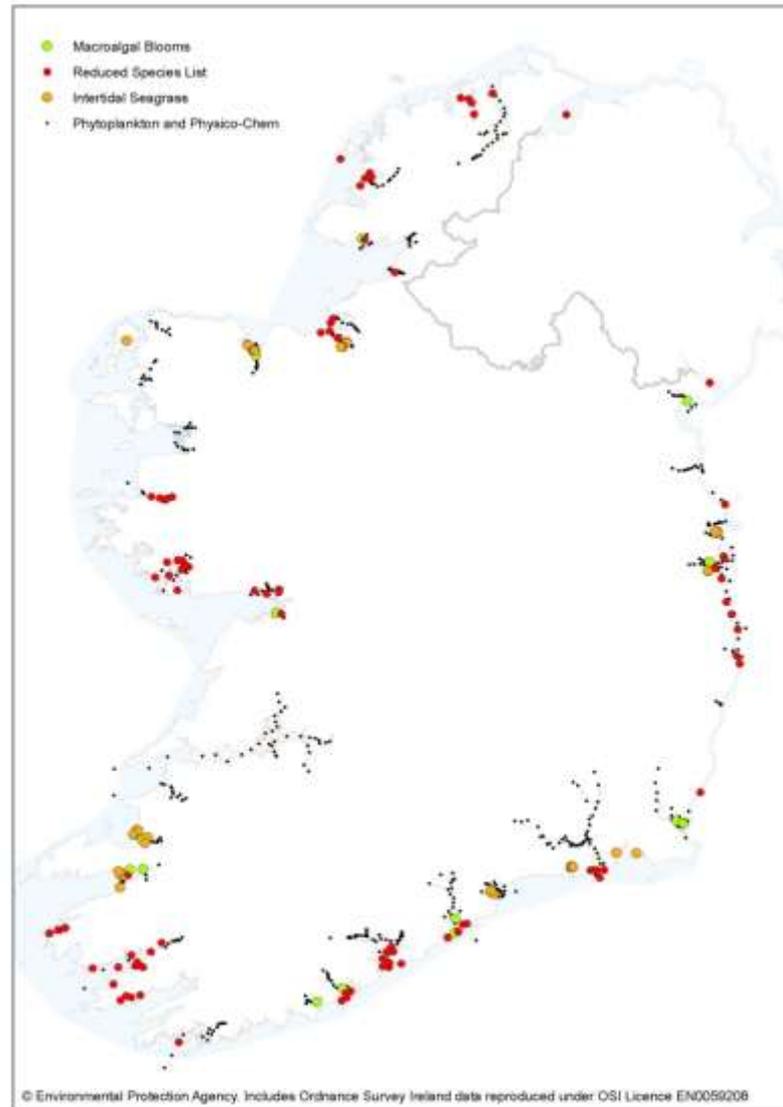
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# SEA GRASS IS VALUABLE

- 'Filet steak' for Brent Geese
- Home to winkles, fish and other organisms





Sea Grass is officially monitored by government agencies.

The EPA surveys intertidal beds and links results to ecological water quality under the wfd The NPWS monitors select sublittoral Zostera beds in protected sites.

- [Map of sea grass and sea weed monitoring from Robert Wilkes.](#)

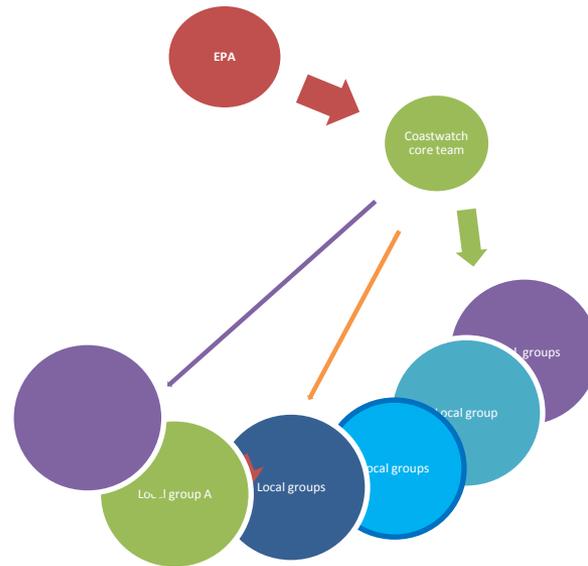
# Coastwatchers record presence of sea grass in annual Coastwatch surveys

Some sea grass locations found are outside the officially (EPA and NPWS) monitored areas.

Few people know the grass and thus sea grass beds are vulnerable to accidental damage.

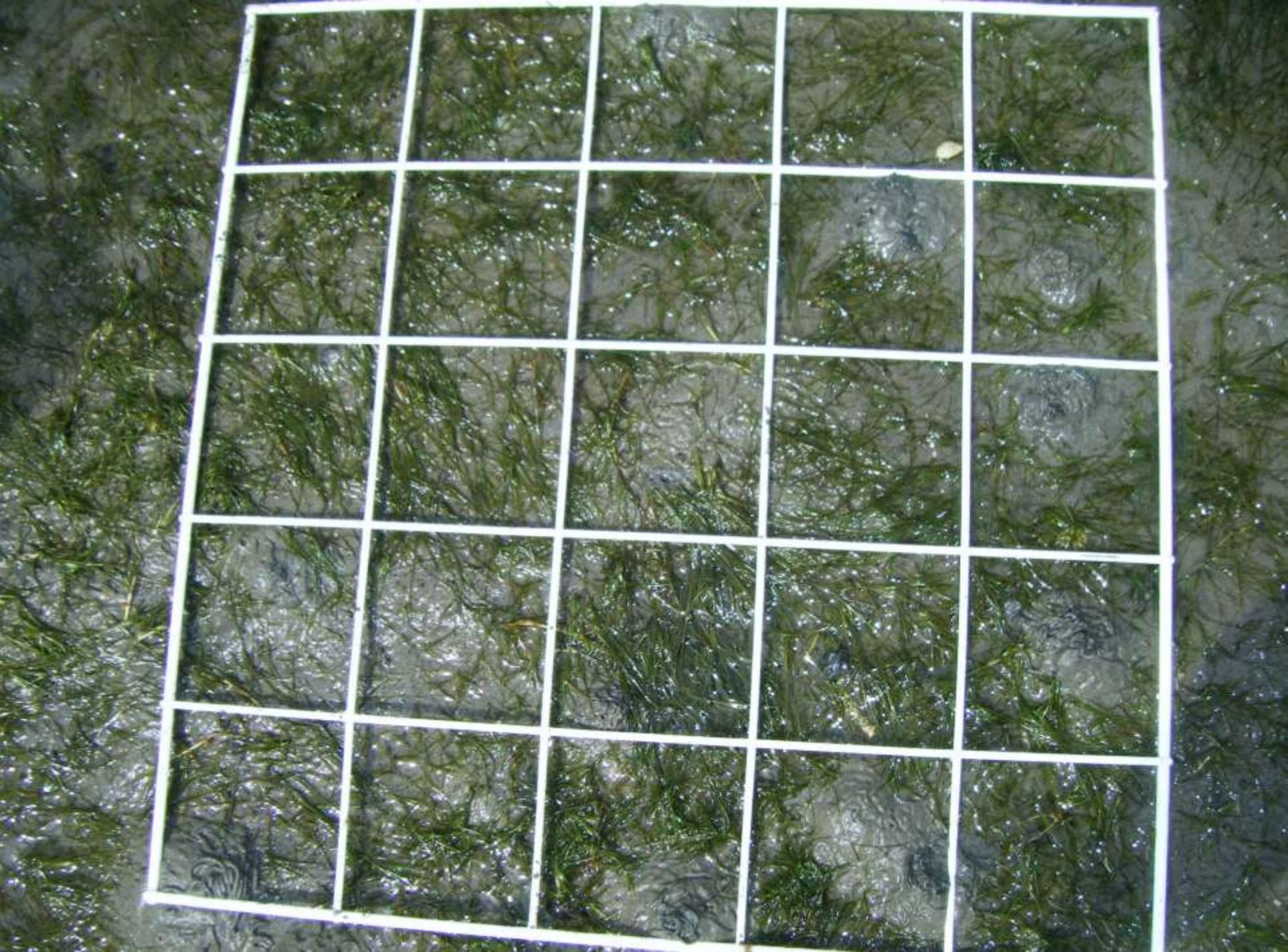
**Sea grass areas are fragile.**

Coastwatch coordinations sought EPA training, with view to disseminating to local groups who had found the sea grass.





Robert Wilkes EPA seaweed and sea grass expert training Coastwatch volunteers in Dublin Bay – looking for: Species present and Seagrass bed spatial extent





# SEAGRASSES and WFD

- Seagrasses are disturbance sensitive (Short & Wyllie-Echeverria, 1996)
- Their presence, health and abundance are used to indicate a water body's classification as being at good or higher status in the WFD

# Threats: include trampling, pollution and aquaculture.

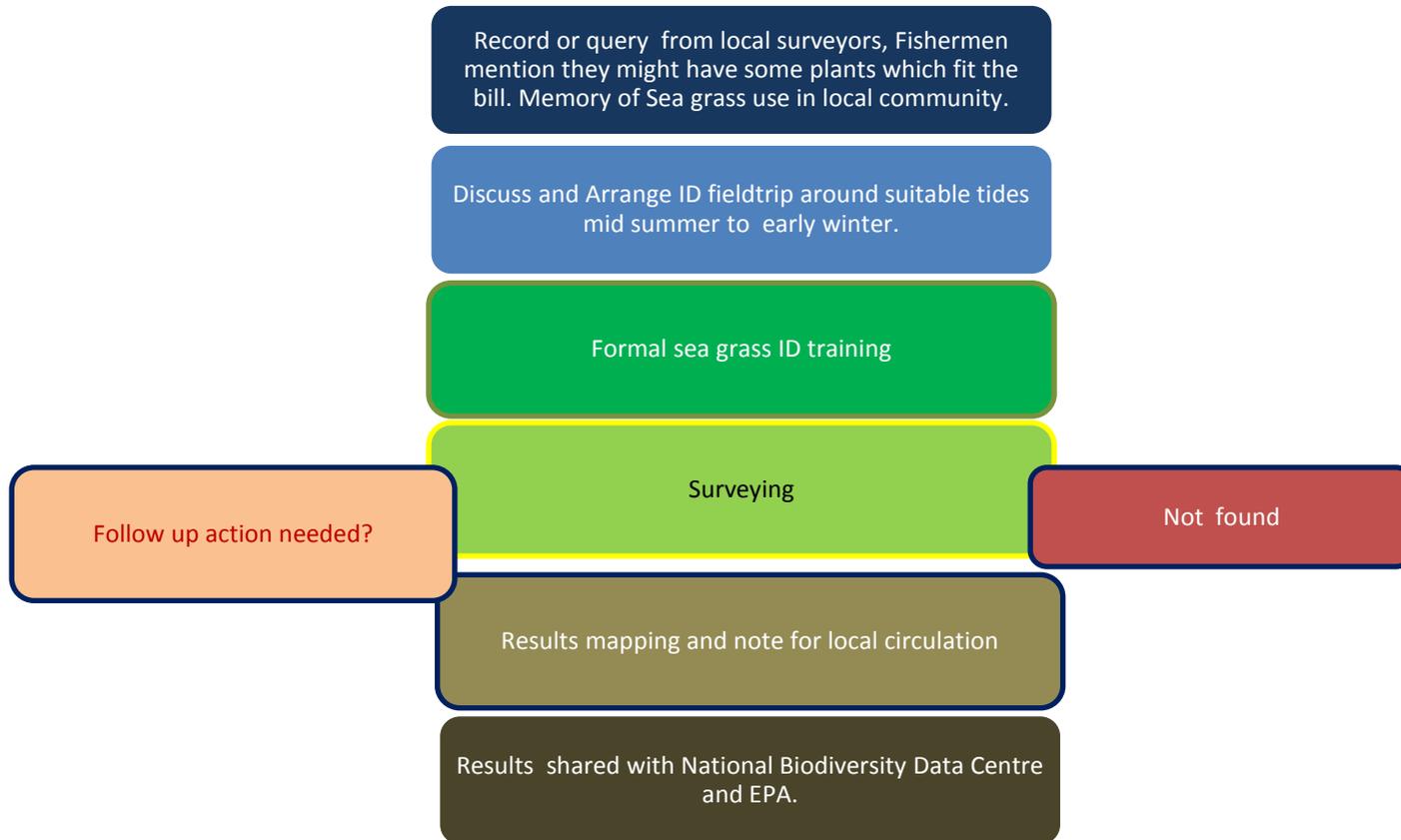


The EPA method was adapted as surveyors were trying it out in Donegal, Louth and Waterford.

## Coastwatch Seagrass protocol



# From local sea grass query to results



# Two sea grass beds had been noted on previous Coastwatch survey on Inch Island L Swilly, Co Donegal



# Lough Swilly Inch Island

after indoor training session

- Intertidal Bed at Inch House surveyed with volunteers from L Foyle and L Swilly
- Surveyors included fishermen, school teachers, interested public.

**Both genotypes of  
Zostera noltii were found in  
A seagrass bed > 500 m long**



# Lough Swilly Inch Island



Mapping this  
large  
Intertidal Bed  
at Inch House

# Lough Swilly Inch Island



Sublittoral  
*Zostera marina*  
bed north of  
Mill Bay (upper  
limit only) 1<sup>st</sup>  
pointed out by  
local  
fishermen.  
Survey at  
lowest spring  
tides (Ilaria  
Vielmini)

# Tramore Co Waterford Back Strand

## Sea grass recovery around the Dump



# Tramore



- Return of intertidal *Zostera noltii* at the dump edge.
- *Zostera marina* patches in the tidal channel running parallel to the dump.
- **But Noted:**
- Large amounts of *Z. marina* washed up along the tideline
- Blackened grass blades in both intertidal & sublittoral



# Dundalk Bay

- Zostera patches numerous in the SPA and SAC site notes based on 1990s survey.
- After extensive survey only 2 small areas of Z noltii were found high on the shore.

The bay has been subject to intensive suction dredging for cockles licensed up to high water.



# Sea Grass and Ulva species

- **Dundalk bay** - Ulva carpet - mistaken ID at abandoned oyster farm, but small *Zostera noltii* patches in the mid bay.



# Threat note

- benthic trawling or rhizome disturbance during shellfish picking or bait digging; vessel mooring, e.g. anchor-chain scour, moorings or beaching of boats; coastal defence engineering, e.g. building groynes, sea walls or breakwaters, beach replenishment, dredging for coastal/harbour development; industrial development, e.g. land reclaim, harbour construction/maintenance, **artificial reefs**; and, waste dumping, e.g. sewage discharge

# Sea Grass Protection

Designation is not enough!

Need local support

HOW?

ID Skills & knowledge empower.

Buy in: Seagrass is a quality indicator to be proud of!

Result: more care with own action and readiness to protect, watch out for, help restore and defend from damage.



# Thank you

to Dr. Robert Wilkes EPA for training,  
Volunteers in Donegal, Dublin,  
Waterford and Dundalk and NPWS

Full list of participants being compiled.



## **Funding:**

**All participants gave their time gratis.  
We covered essential costs from own means  
and Coastwatch core funding. Depending on  
whether we can recover costs and get  
sponsorship for print up, hard copies of results  
and the protocol will be produced.**