



## KEY STAGE 5 (16-18)

### Ecosystem Services and Management Activity

Seagrass meadows offer a variety of beneficial services to humans, the grass itself provides an amazing habitat for some of the world's largest fisheries whilst under the sediment the root system is busy storing carbon. At Project Seagrass we work to educate communities on the benefits of seagrass in the hope of protecting meadows around the world and in some areas even working to restore meadows which have been damaged or destroyed by anthropogenic activity.

Using the internet and the [Project Seagrass website](#) have a go at the following activities!

#### Activity 1 - Definitions

Define in your own terms:

- 1 - Seagrass
- 2 - Biodiversity
- 3 - Community
- 4 - Conservation
- 5 - Management
- 6 - Ecosystem services

#### Activity 2 - Ecosystem Services

Outline and explain what ecosystem services (*supporting services, provision services, regulating services, cultural services*) are, and how they can benefit society! Give reference to seagrass meadows (max. 500 words)

#### Activity 3 - Management Plan

The most effective way to protect seagrass meadows is to work with communities. Fishing and recreational sports are just some of the activities that can cause seagrass meadows to diminish, however in many areas these are primary sources of income for local communities. With this in mind it simply isn't appropriate to introduce total bans on these movements. Liaising with local residents and authorities allows us to devise management plans which can protect both the seagrass and the livelihoods of those living near a meadow.

Using what you've already learnt and any resources you find appropriate, compose a management plan that reduces disturbance to a seagrass meadow whilst allowing local communities to resume their usual activities. For example, introducing reduced speed limits or seasonal water sports.

Spend 90mins on this. Present it in any format you feel comfortable using, e.g. a presentation, diagram or essay.



## **Key Vocabulary**

Conservation	Photosynthesis	Pollution
Boating	Oxygen	Climate
Mitigation	Carbon store	Sediment
Management	Carbon Dioxide	Coastal protection
Biodiversity	Climate change	Food security
Community	Awareness	Fish nurseries
Fisheries	Carbon sequestration	Degradation
Ecosystem Services	Organic carbon	Poverty alleviation
Local	Education	Sustainable fishing
Influence	Bioregions	Commercial
Recreational	Coral reefs	Mangroves

## **Seagrass Bioregions (Short et al, 2007)**

