

Frequently Asked Questions

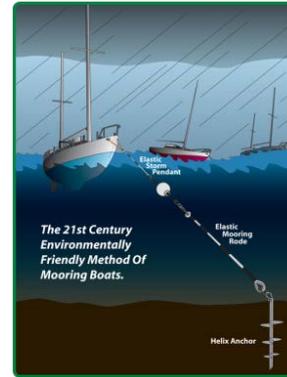
What is an Environmentally Friendly Mooring?

There are 2 main types of Environmentally Friendly Moorings or EFM's used in NSW and Queensland

Seagrass Friendly Mooring



Eco Mooring



Environmentally Friendly Moorings cause less damage to the seagrass bed, by ensuring there is minimal contact with the sea bed, while still being able to safely secure vessels.

What are the design features of Environmentally Friendly Moorings?

Although the designs are different both the Seagrass Friendly Mooring and Eco Mooring incorporate an anchor post tipped with a screw helix or 'auger', which is drilled into the substrate and fixed in one location thereby avoiding the dragging that is commonly experienced with conventional block and chain moorings.

Seagrass Friendly Mooring design

A 3.8 meter long mooring post is screwed into the seabed as the anchor point. Attached to the mooring post just below the sea bed is a set of load spreaders to stabilise the post. We then attach an "Aquatec" UV stabilised marine grade riser from the top of the anchorage at seabed level to the shock absorber located inside our specially designed surface buoy. A "hawser" or pick up line is then connected to the other end of the shock absorber. The Seagrass Friendly Mooring is installed and maintained from a boat fitted with a hydraulic auger drive. [\[go to product website\]](#)

Eco Mooring design

Mooring consists of a helix anchor and Eco Mooring Rode. Other required components are normal readily available mooring parts. The helix anchor is screwed into the seabed and is adaptable to almost any type of substrate e.g. sand mud, etc. The rode is the shock absorber of the mooring. It offers high flexibility by using an elastic core inside very strong rope. It allows the boat to move in surge and waves, without causing continual shock on the anchor. These rodes have been bench tested to 33,000 lbs. The system allows for any buoy to be used on the surface. [\[go to product website\]](#)

What area of seagrass can be affected by conventional block and chain moorings?

Individual block and chain moorings have caused the damage of up to 706 m² of seagrass. The average scour area in Lake Macquarie is around 167 m² and scientists recently measured the total damage to seagrass in Lake Macquarie of 114,875 m². [\[see full report\]](#)

Is there financial assistance available to install EFMs in Lake Macquarie?

Hunter Local Land Services are funding a mooring upgrade program with assistance from NSW Government's Catchment Action NSW and the NSW Recreational Fishing Trust. Mooring holders who wish to upgrade their conventional mooring to an EFM can apply for a 50% rebate from Hunter LLS.

Can EFM tackle be retrofitted to a conventional block? Is this also eligible for a rebate?

EFM tackle can be retrofitted to a conventional mooring block and is also eligible for a 50% rebate on the cost of installation. Full upgrades are preferred as the environmental benefit is greatest.

Who owns and maintains the mooring after it is installed and how often is it serviced?

Once installed, the mooring becomes the property of the registered mooring holder although operation and maintenance of the mooring for at least 5 years is a requirement of accepting the rebate. The mooring needs to be serviced annually in accordance with the mooring licence conditions set by Roads and Maritime Services. The mooring contractors installing EFMs have expertise in servicing their particular designs and have professional indemnity insurance covering their work.

Have EFMs been trialled and shown to be safe and effective at protecting seagrass?

EFMs have been trialled in NSW, Queensland and the USA and the designs used in the Lake Macquarie Project have been shown to be safe, secure and effective at protecting sensitive seabed habitats like seagrass. In 2014, a demonstration event in Lake Macquarie clearly showed the superior hold of EFMs over Lake Macquarie. [\[see video\]](#)

What is the anticipated life span of the hardware?

The life span of each component of the EFMS varies. For example, the engineered rating for the Seagrass Friendly Mooring is 15 years for the key component being the mooring shaft while the shock absorber needs to be serviced annually. The Eco Mooring's Helix Anchor has a 10 year warranty and the Eco Rode has a 3 year warranty.

On replacement with the Seagrass Friendly Mooring, will there be removal of the existing block and chain apparatus?

Yes the existing mooring will need to be removed; for a partial upgrade, the relevant parts (such as the chain) will need to be removed. This is included in the cost of installation.

If successful, do we need to be present for the replacement of the mooring?

No, we will notify you closer to the installation date of when your mooring will be replaced. If you would like to be present that is fine also.

Will the mooring device have an equivalent holding capacity to the original device?

EFMs have standard designs that have been independently tested and certified for their strength and holding capacity. Unfortunately the design and materials of conventional block and chain moorings varies and there is no “standard” so it would depend on the design and materials of the original device. Testing has shown that EFMs have a greater holding capacity than equivalent block and chain moorings [\[see video\]](#).

Is the mooring ownership transferable?

The mooring apparatus belongs to you and you can sell this after 5 years, however you cannot sell the mooring location. Within the first 5 years the mooring apparatus can be transferred to another mooring holder taking over the same location if there is agreement between LLS, RMS and the new mooring holder.

If we aren't happy with the new mooring, can we change back to our old mooring?

You can have the mooring removed but this will be at your own cost and if the mooring is located in an area of sensitive habitat you may not be able to reinstall a block and chain mooring in the same location.

If you are not happy with a newly installed mooring firstly contact the provider to see if adjustments can be made. If you are not happy with the response contact Hunter LLS and we will pursue the issue on your behalf if your request is reasonable.

Are EFMs covered by public liability insurance etc?

Yes. The companies installing Environmentally Friendly Moorings, On Water Marine Services Pty Ltd and Waters Marine Pty Ltd have insurance coverage for public liability, products liability and professional indemnity.

How have EFMs performed in cyclone conditions?

Seagrass Friendly Moorings were installed in Moreton Bay prior to Tropical Cyclone Oswald and no failures were experienced due to storm weather although fouling from other vessels that had broken or dragged their conventional moorings did occur. See the case study on the [Hunter LLS – Environmentally Friendly Moorings webpage](#) for more information.

What are the maintenance issues in shallow water when you have high algae growth?

In areas with high algal growth cleaning of the mooring lines will be needed as required.

For more information go to the [Hunter LLS – Environmentally Friendly Moorings webpage](#)