

# Gippsland Lakes Shellfish Reef Restoration Project

## Fact Sheet

### What is the Project?

The Nature Conservancy Australia (TNC) are building shellfish reefs in the Gippsland Lakes to restore shellfish reef ecosystems and the environmental, social and economic benefits they bring: clean water, more fish and increased biodiversity.

The Gippsland Lakes is one of 13 sites identified for reef restoration under the Reef Builder initiative, a \$20 million partnership between the Australian Government and TNC, to bring shellfish reefs back from the brink of extinction and support the economic recovery of communities impacted by bushfires and COVID-19 restrictions

### Who's involved?

TNC is delivering the Gippsland Lakes project in partnership with the Australian Government and the East Gippsland Catchment Management Authority (EGCMA) and in support of the broader 'Love our Lakes' initiative, which fosters a shared responsibility in caring for the lakes and catchment. We will also engage several specialist contractors for the construction, seeding (placing baby oysters on the reefs) and monitoring phases over 2022 and 2023.

### Why are we restoring shellfish reefs?

Historically, abundant shellfish reefs naturally occurred along the eastern and southern coasts of Australia, from Noosa to Perth. They provided important habitat for fish and marine life and were an important resource for First Nations people, who have harvested native oysters for over 10,000 years.

Since European settlement, Victoria has lost 95% of Australian Flat Oyster and Blue Mussel reefs from estuarine and coastal waters. Oyster reef habitat in Victoria is considered functionally extinct and there are no Australian Flat Oyster reefs in the lakes, but some remnant mussel reefs persist.

Restoring shellfish reef ecosystems in the Gippsland Lakes will provide food and shelter for many marine species and will provide new recreational fishing and tourism opportunities which will help support the economy of the Gippsland Region.

The Gippsland Lakes are recognised internationally as a Ramsar site for their significant environmental values. Protecting and enhancing these values underpins the recreational benefits of the lakes so many Victorians enjoy.

### What are the benefits of shellfish reefs?

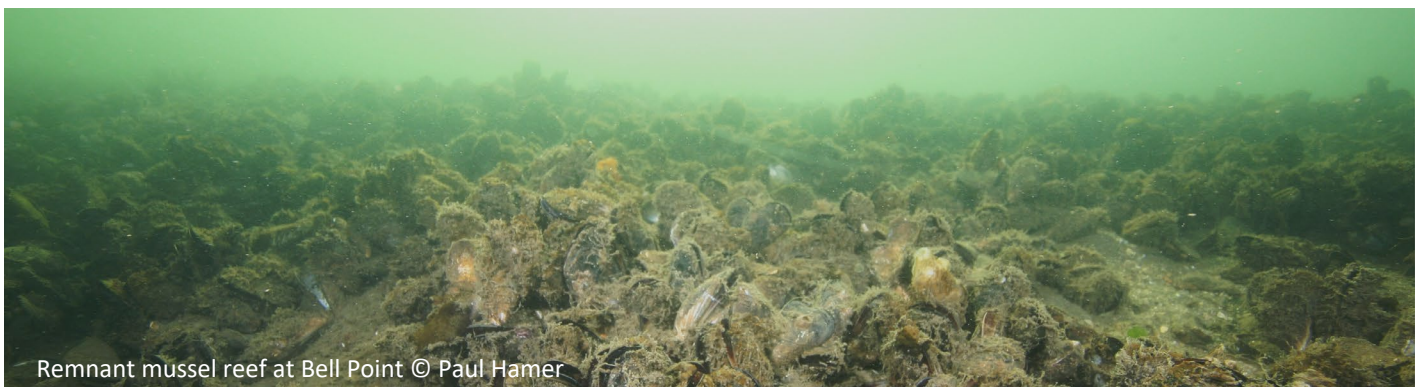
The return of shellfish reefs to the Gippsland Lakes has many benefits for the local community and nature. This includes:

- improving marine biodiversity, fish production and water quality
- providing further opportunities for people to enjoy recreational fishing, snorkelling and diving
- providing a boost to sustainable tourism
- creating community engagement opportunities including volunteering and citizen science

### Where are the sites and how were they selected?

We have Victorian government approval to restore up to 5 hectares of shellfish reefs across two sites in the Gippsland Lakes, located near Metung and Nyerimilang. We will begin by restoring shellfish reefs at Nyerimilang, in a water depth of 7 m.

The sites were selected after a detailed investigation of the most suitable sites within the Gippsland Lakes, which considered a range of factors including environmental conditions, stakeholder feedback, existing and future uses and the location of marine infrastructure.



Remnant mussel reef at Bell Point © Paul Hamer



Sea squirt on mussels near Metung © Paul Hamer



Anemones in the lakes © Sean Phillipson/EGCMA



Seahorse in the lakes © Sean Phillipson/EGCMA



Gurnard perch on mussels © Sean Phillipson/EGCMA

## How do you build shellfish reefs?

1. Using a barge and long-reach excavator, locally sourced limestone is placed on the seabed in defined reef patches and provides a foundation for the oysters and mussels to grow.
2. Adult oysters are collected from the Gippsland Lakes and taken to the Victorian Shellfish Hatchery under strict biosecurity controls approved by the Victoria Fisheries Authority. The oysters release larvae which settle onto clean recycled scallop shells. Once attached to the scallop shells ('seeded cultch'), we let the oysters grow for a few more weeks.
3. The seeded cultch is then placed onto the reefs ('seeding'), where the oysters continue to grow and eventually, reproduce, helping to form the reef structure. Wild mussel larvae, which occur naturally in the lakes, will also settle on the reef foundations, as will a variety of plants and other marine life. Over time, the reefs will become thriving ecosystems.
4. We monitor the reefs before and after construction to measure success over time.

## When will the reefs be built?

We will begin constructing the reef bases in March 2022 and this will take about three weeks. Shortly after construction, a selection of the reefs will be seeded with Australian Flat Oysters.

Further seeding of the remaining reefs will occur in late 2022/2023. Once completed, the total restoration area at Nyerimilang will be up to 3 hectares.

## Can I get involved?

Yes. The EGCMA are coordinating a citizen science program which will provide opportunities for local volunteers to get involved in activities such as oyster gardening and monitoring. We will also run community forums for interested people to come and find out more about the project and to get progress updates.

To find out more visit:

Website

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Australian Government

