

PORT RIVER SHELLFISH RESTORATION PROJECT
Draft PROJECT PLAN, January 2016

Background

This project is occurring in a wider context of projects to restore the Port River estuary and to enhance our environment's and our community's capacity to respond to climate change.

Nature is very different from patch to patch e.g. pests, depth of sediment in the Port River, and there's a lot that we don't know about shellfish restoration. However experience in USA through The Nature Conservancy, suggests that learning by trial and error is the way to proceed.

We're seeking, in the short term, ecological benefits from shellfish restoration; however in the long term we hope for consumption of local shellfish.

Our approach to our project includes addressing history, science, education and community engagement.

We envisage this as multi-generational project, many benefits of which will be derived beyond our lifetimes.

Angasi

Angasi is a subtidal species e.g. found at 30 metre depths and might also grow in estuarine environments. They don't like to be out of water for extended periods e.g. their shells are thinner than Pacific oyster.

Experience in Port Phillip Bay suggests that Angasi cannot be too close to soft sediment e.g. 10cms above bay floor was too low and the oysters were smothered. *(Lots more we need to learn from these and other experiences)*

Short term priorities (1-2 years)

Learn history of shellfish in Port River estuary and have it inform our plans.

Mussels

Understand life cycle of mussels and collaborate with Prof Sean Connell in research projects about them.

Engage students (e.g. Portside Christian and Ocean View) in research, monitoring and growth of our mussel population

Native oysters

Understand what's known about native oysters (Angasi) and what's not re life cycle, habitat etc

Identify prospective sites for native oyster trials based on history, existing shellfish species, accessibility of sites, approvals to access, river conditions etc

Bring together materials and people to implement native oyster trials

- Plates
- Spat (there are hatcheries in Port Lincoln)

- Recruit volunteers (need to determine roles, numbers of volunteers needed etc)
- Expertise in research methods and co-ordination of research project
- Bring plates and spat together (e.g. seeded substrate from this area) and undertake placement
- Monitoring, recording and analysing results

Community Engagement

Seek opportunities for involvement/collaboration with

- Kaurua people
- Schools
- Local businesses e.g. fish processors, restaurants, pubs
- People interested in local environment
- Oyster industry

Present the project and our plan at a Port Environment Forum meeting in 2016 to build awareness and attract volunteers

Share what we're learning with local community and with other communities/groups interested in shellfish restoration. This might include presentations (for schools and community groups), own website etc.

Oyster Shell Collection

Investigate the possible nature of our involvement with oyster shell collection, recycling and reuse and decide the timeframe for our involvement e.g. is it a short term or medium term issue?

Long term vision (20 years +)

Restoration of a healthy Port River estuary ecosystem

Native oysters are cleaning the River and native oyster reefs are attenuating wave action from rising sea levels

Port River estuary provides a healthy environment for humans (e.g. swimming, food) and for our dolphins, and is more bountiful as a fish nursery and habitat for birds and other living beings.

Across generations of locals, people understand and value the ecology of the Port River estuary.

Community is connected to the Port River; engaged in monitoring and protecting its well-being.

There is growing, sustainable consumption of shellfish with reduced carbon miles from locally grown and sustainably harvested shellfish

What will we be doing with oyster shells at this stage?

Learning from our project – science, history, community engagement, partnerships etc – is documented and shared widely to encourage and support other communities in shellfish restoration and marine ecology

The Port River's transformation, and the local community's role in this, provides positive recognition for our area at State and national level. This includes recognition of the practical things that community members did/can do to assist our environment respond to climate change.