

CSF043: MIDDLETON BEACH – ARTIFICIAL SURF REEF FEASIBILITY

- Land Description** : Coastal regions Middleton Beach to Emu Point Inclusive
Attachments : Middleton Beach Artificial Surf Reef Summary Memo (PRDW)
Councillor Workstation : Documents referred to in the report placed in the Councillor Workstation.
Responsible Officer(s): : Executive Director Corporate Services (G Adams)

Responsible Officer's Signature:



STRATEGIC IMPLICATIONS

1. This item relates to the following elements of the [City of Albany Strategic Community Plan 2023](#) and [Corporate Business Plan 2013-2017](#):
 - a. **Key Theme:** 2. Clean, Green and Sustainable
 - b. **Strategic Objective:** 2.1 To protect and enhance our natural environment.
 - c. **Strategic Initiative:** 2.1.2 Erosion protection and adaption

Maps and Diagrams: (Detailed in the attached report)

In Brief:

- A feasibility report has been prepared and is attached for information.
- Council is requested to consider its position on the project.

RECOMMENDATION

CSF043: COMMITTEE RECOMMENDATION
VOTING REQUIREMENT: SIMPLE MAJORITY

THAT Council:

- **NOTE** the report prepared by *Prestedge Retief Dresner Wijnberg Australia Pty Ltd;* *and*
- **CONSIDER** funding more detailed scoping studies as part of the 2014/2015 budget deliberations.

CSF043: COMMITTEE RECOMMENDATION

MOVED: COUNCILLOR STOCKS
SECONDED: COUNCILLOR CALLEJA

THAT Council:

- NOTE the report prepared by *Prestedge Retief Dresner Wijnberg Australia Pty Ltd*; and
- CONSIDER funding more detailed feasibility studies as part of the 2014/2015 budget deliberations.

CARRIED 9-3

CSF043: RESPONSIBLE OFFICER RECOMMENDATION

THAT Council:

- NOTE the report prepared by *Prestedge Retief Dresner Wijnberg Australia Pty Ltd*; and
- CONSIDER funding more detailed feasibility studies as part of the 2014/2015 budget deliberations.

BACKGROUND

2. At the Ordinary Council Meeting on the 16th April 2013 Council resolved:
“THAT the CEO be instructed to prepare a report, with projected costings, on the possibility of providing an artificial surfing reef off Middleton Beach.”
3. In response City staff commissioned *“Prestedge Retief Dresner Wijnberg Australia Pty Ltd* (PRDW) to prepare a feasibility report in respect to establishing an artificial surf reef at Middleton Beach near the Albany Surf Life Saving Club.
4. City staff engaged a consultant who had already undertaken a significant body of work for the City, in respect to coastal protection strategies for shore line located at and between Emu Point and Middleton Beach.
5. To ensure the feasibility report was not distracted from other proposed coastal management strategies, the concept was addressed in isolation.

DISCUSSION

6. Caution needs to be exercised in moving forward with a project of this nature. The quantum and quality of data currently available to the City is not considered sufficient to guarantee a successful project outcome.
7. Based on the report, Staff feel that additional detailed scientific studies (more data needs to be collected and modelled, to explore cause and effect) to have confidence in achieving a successful outcome in the long term.
8. It is felt that consideration must be given to overall impacts on the coastal system and any effects a project of this nature may have regarding coastal systems in general.
9. The overall response is that an artificial surf reef is feasible.

GOVERNMENT & PUBLIC CONSULTATION

10. In general the consultation has included:
 - a. Local surfers;
 - b. Albany Port Authority;
 - c. Great Southern Development Commission;
 - d. Department of Transport;
 - e. Department of Parks and Wildlife(formally titled the Department of Environment and Conservation); and
 - f. Interested City of Albany Councillors.
11. Historic Consultation. In addition to the recent consultation (as above), various correspondence dating back to 1999 and minutes from a key stakeholders meeting held in June 2008 was considered and is detailed in the report.
12. Albany Port Authority. Input was provided by the Albany Port Authority and a private consultant acting independently.
13. Public Consultation. Thorough consultation was undertaken during the preparation of the PRDW report and is detailed within.

STATUTORY IMPLICATIONS

14. There are no statutory implications related to this report.

POLICY IMPLICATIONS

15. There are no policy implication related to this report.

RISK IDENTIFICATION & MITIGATION

16. The risk identification and categorisation relies on the City's [Enterprise Risk Management Framework](#).

Risk	Likelihood	Consequence	Risk Analysis	Mitigation
<i>Lack of Consultation on Feasibility</i>	<i>Likely</i>	<i>Moderate</i>	<i>Low</i>	<i>Thorough consultation was undertaken by PRDW (detailed in the report).</i>

FINANCIAL IMPLICATIONS

17. Implementation costs for artificial reefs are very difficult to quantify without detailed targeted data collection and detailed modelling and scientific studies.
18. The PRDW report suggests through anecdotal evidence that a tennis court size reef which would potentially yield a moderate wave in favourable conditions is in the order of \$2 to \$5 million. Calculation of any costs need to include capital and ongoing maintenance, approvals etc.
19. The costs of these studies can be considerable and take time (12-24 months) unless this information is made available from other sources and is independently assessed to be adequate.
20. Indicative costs to provide the detailed feasibility to enable the project to progress further, (assuming that the required data collection and modelling information was available to be assessed) would be expected to be in the order of \$ 60-100K. Quotations would need to be sought.

21. At this stage, there are no agencies prepared to look at funding the project.

LEGAL IMPLICATIONS

22. Nil

ENVIRONMENTAL CONSIDERATIONS

23. Any proposed works would require an Environmental Impact Assessment.

ALTERNATE OPTIONS

24. The Council may decide to give no further consideration to this project.

SUMMARY CONCLUSION

25. Construction of an artificial surf reef at Middleton Beach to improve wave quality is feasible however it is qualified that there is insufficient data and modelling work done to have any indication of the success of any works.

26. At this stage, there are no agencies who have expressed any interest in funding such a project. To attract funding, there would need to be more work done in order to have confidence in the projects success and potential cost benefit.

27. It is recommended that Council clarify its position on the project moving forward.

Consulted References	:	<ul style="list-style-type: none">• PRDW Memo – Middleton Beach Artificial Surf Reef Summary• A key previous body of work is a feasibility study into an artificial surfing reef at Middleton Beach by ICM (dated Dec 2003).
File Number (Name of Ward)	:	(Frederickstown)(Breaksea) Wards
Previous Reference	:	OCM 16/4/13 Item 17.1