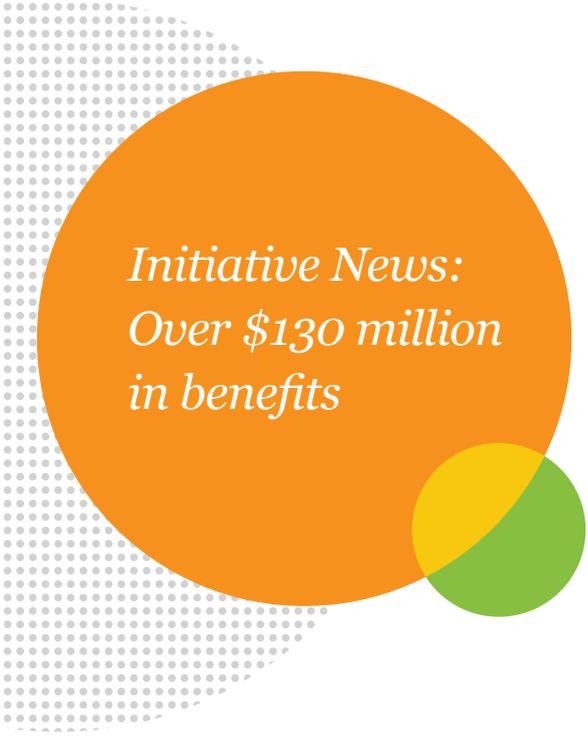


SPENCER GULF ECOSYSTEM & DEVELOPMENT INITIATIVE

SCIENCE UPDATE
AND OUTCOMES
MAY 2015



MAY 2015 UPDATE



*Initiative News:
Over \$130 million
in benefits*

The Spencer Gulf Ecosystem & Development Initiative (SGEDI) is reducing costs, aiding development and answering environmental challenges for one of South Australia's leading economic development zones.

Benefits are substantial. A cost-benefit study conducted by Econsearch finds over \$130 million of value - community, economic development and protected environments - may result from the Initiative.

The Initiative's overall objectives are:

- Clearer approval pathways to reduce costs and time delays.
- Information, tools, capabilities and networks to assist in approval pathways.
- Community support and public comments more likely to be based on evidence.
- A thriving Gulf region, where progressive developments occur, community opportunity is optimised and the unique ecosystem is protected and enhanced – specifically through effective consideration of cumulative, chronic and long term environmental stresses.

Outcomes, to date, include:

- Developments may conduct expensive environmental assessments often partially duplicating the work of other companies or organisations. The Initiative is consolidating key aspects of this work, for example, on whales.
- Facilitating data sharing between BHP Billiton and Flinders Ports. This reduces costs, time delays and duplication that may occur in conducting the necessary environmental investigations.
- Assisted Centrex to gain federal environmental approval. Centrex's prior participation in the Initiative resulted in assurance around its responsible corporate citizenship. The company's EPBC approval contains a condition requiring it to continue its participation in the Initiative. It consequently helps to assure stakeholders that cumulative impacts are considered.

Across a large and unique system – the Spencer Gulf – there are important existing mining activities alongside industrial uses, commercial fishing and recreation. Each has different concerns over new developments, future activities and environmental changes. To improve outcomes, cooperation and understanding, BHP Billiton, Santos, Nyrstar, Alinta, Arrium, Centrex, Finders Ports and the Fisheries Research and Development Corporation became investors in the Initiative. Additionally, there are a broad range of supporting partners including prawn and aquaculture industry associations, regional bodies and local government.

The full program plans to:

- Develop a whole of Gulf, broad scale, understanding.
- Engage across multiple investors and partners to co-address common problems.
- Facilitate knowledge sharing of environmental information and data sets.
- Be a credible independent voice for the Gulf.
- Ensure communication that allows tensions and concerns to be raised early and discussed in the context of Gulf science.
- Deliver science for coexistence of communities, industry and ecosystems.



Figure 1: Cumulative impact and the Spencer Gulf system. A decision support system will help users find the best outcomes, cut potential industry and community costs and understand our management alternatives. It will help to enable more sustainable economic and environmental futures.

SCIENCE

To date, science outputs include a major knowledge review of the Gulf's environment, ecology and potential development pressures alongside community and stakeholder perspectives relating to this. The review lays the foundations for prioritising research - work that will address the Gulf's environmental system, as a whole, in a cost effective manner.

Specific investigations, filling in some of our knowledge about the Gulf, are underway. This is being undertaken through work that includes developing ecosystem models, adding to our giant Australian cuttlefish knowledge, managing whale and shipping interactions and the potential for coastal species, such as mangroves, to shift as the climate changes.

These science investigations and the entire Initiative create greater environmental certainty and assist with development and jobs in the region.

Key future research is investigating how an integrated approach to the Gulf can manage environmental pressures and shipping. The work:

1. Synthesises existing information on all current activities and impacts in Spencer Gulf;
2. Conducts detailed analysis of current shipping activities and predicts likely future scenarios for shipping (and port development);
3. Conducts risk analysis for introduction and establishment of exotic pests and pathogens under a range of future ports and shipping scenarios;
4. Conducts a risk assessment to identify key iconic and threatened species, data deficiencies and needs, and species status for Spencer Gulf focusing particularly around shipping;
5. Develops tools for predicting interactions of future ports and shipping scenarios with other industries;
6. Engages broadly and uses the findings to inform managers, leaders, stakeholders, government and the broader community.

This year's research program will be detailed in the next Initiative update.



“Science to understand iconic issues, the Giant Australian Cuttlefish and the whole Gulf system”.

SCIENCE

Stakeholders

In 2014, a new round of consultation was undertaken with stakeholders. It generated input from nearly 100 people across the Spencer Gulf region and with stakeholders in Adelaide. Formal workshops were held in Port Lincoln, Whyalla and Adelaide. There were also a range of less formal individual and group meetings in Port Lincoln, Whyalla, Port Augusta and Port Pirie as well as with key industry and local, state and Australian government politicians.

We received feedback from the community, industry, non-government organisations, environmental interests, local governments, South Australian government agencies and statutory bodies as well as other interested individuals.

The stakeholder report summarises the substantial themes and key issues from these engagements.



FURTHER INFORMATION

For further information and detailed reports and reviews please go to:
[www.adelaide.edu.au/
environment/water/
spencer-gulf/](http://www.adelaide.edu.au/environment/water/spencer-gulf/)



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