

Friends of Gulf St Vincent

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The Friends of Gulf St Vincent recently produced this impressive flag to advertise their conservation initiatives. The design shows a blue swimmer crab, and 'Blue Swimmer' is also the name of the friends newsletter. Design John Whitney and Phil Easson.

What the 'Friends of Gulf St Vincent ' offers is a bank of professional experience, freely accessible to the public. When coupled with a keen new environmentally aware generation, adept at finding and using information, the friends are providing a substantial contribution to marine conservation.



The dredging of the Port River produced large amounts of silt and turbidity resulting in the destruction of marine plants and animals. Image provided by Friends of Gulf St Vincent.

Gulf St Vincent lies about the middle of the southern coast of Australia. The Gulf runs north-south for 150km and is 60km wide at its mouth. Adelaide the capital of South Australia, with a population of one million, is midway on the eastern shore of the Gulf. The environment of the Gulf is subject to urban, industrial, and agriculture pollutants including about 6000 tonnes of silt a year from urban runoff.

Areas of the Gulf have also been damaged by trawling and dumping from dredges. In fact the Gulf St Vincent, as part of the largest warm-temperate seagrass community in the southern hemisphere, has already lost several thousand hectares of seagrasses to trawling, siltation and nutrient overload



Seaside locations like Second Valley in the lower part of the Gulf still have relatively clear water and intact vegetation on both reefs and rocks, and scattered clean sandy substrates. Image Robert Browne.

The Gulf has high biodiversity of warm- to cool-temperate marine plants and animals, including a very high diversity of seaweeds. It is in the center for diversity of seadragons, pipefish, and weedfish. The complexity of this ecosystem and its sensitivity to extra nutrients make it highly vulnerable to water pollution.

The 'Friends of Gulf St Vincent' formed in 2003 to raise community awareness of the need for integrated natural resource management of Gulf St Vincent. The 'Friends' have an expert base of members with backgrounds from professional involvement in policy and management of aquatic resources, and advisers who have been directly involved in research and administration of marine and freshwaters, adjoining lands, and fisheries.

The 'Friends' also draw on seasoned environmental activists in the cause of the coastal and marine environment conservation. Our first community forum indicated a strong interest among coastal conservation groups in having a unified approach to the protection of Gulf St Vincent and in learning more about the Gulf's ecology.

As a marine conservation organisation the 'Friends' differ from many conservation groups on land because of a current lack of projects for 'on the ground' activities in the marine sphere. Fundamentally, the 'Friends' act as an information gathering system to conduit information to various marine conservation projects. The 'Friends' also draw on professional teachers within our membership, to collate, condense and disseminate information. The 'Friends' remain mindful of the test - "When you can explain something to children, then you know you understand it"

In common with many areas of the world seagrass in the Gulf has been killed by suspended solids, and nutrients, which now impede their recovery. A good way to reduce these impacts is to harvest stormwater runoff.



Muddy water running into Gulf St Vincent from a "rehabilitated" quarry site at Maslin Beach south of Adelaide after rain. Photographer John Houlahan.

The domestic needs of Adelaide could be met by the stormwater runoff from the city and from the local Mount Lofty Ranges catchment. Unfortunately much stormwater still runs directly into the Gulf often laden with large amounts of silt from unstable and disturbed soils from developments.

The waste of this water - and the consequent destruction of the marine environment - indicates a major change to the management of fresh waters is needed. Many freshwater ecosystems, fish and other freshwater species are also suffering from the wastage of freshwater and its pollution load.

Besides conservation problems with fresh water systems around the Gulf, a recent marine conservation problem has been dredging to create channels for shipping. In the Gulf the normal problems of siltation and the release of pollutants in the sediment from dredging, are compounded by the presence of a major invasive marine weed *Caulerpa taxifolia*. This weed is causing havoc to marine environments around the world.

A series of expensive and often delayed attempts by the South Australian Government to prevent the spread of *Caulerpa taxifolia* had failed. *Caulerpa taxifolia* was well established in the Port River system, the location of Port Adelaide and Outer Harbour, before the dredging began. The 'Friends' asked the State Development Assessment Commission to ensure that the dredging of the Port River conformed to international protocols on dredging to which Australia is a signatory. The South Australian Government refused to comply and waived virtually all standards. The government thus adopted an attitude to the protection of the marine environment more often found in third world countries. The resultant turbidity from the dredging had significant immediate impact on Adelaide metropolitan beaches and adjacent seagrass beds, resulting in further destruction of Gulf ecosystems.

This government policy of allowing dredging unconstrained by the presence of *Caulerpa taxifolia* in the port River system was highly hypocritical. The government claims to be making a major effort to prevent the spread of this marine weed. For instance, at the time of the dredging mariners were restricted in their movements in the Port River system to prevent the spread of *Caulerpa taxifolia*. Mooring around the Port River was also limited to reduce the risk of spreading *Caulerpa taxifolia* to other ports. Warnings were issued; *Caulerpa taxifolia* is extremely invasive and has been spread between launching sites by trailer boats in other Australian states. Nevertheless, the South Australian Government allowed the offshore dumping of dredged material that probably contained *Caulerpa taxifolia*.

For information produced by the South Australian Governments referring to their program to control *Caulerpa taxifolia* see http://www.pir.sa.gov.au/pages/fisheries/environmental/caulerpa_taxifolia.htm:sectID=1983&templID=1

The government claimed that any *Caulerpa taxifolia* released from the dumped dredged material from the infested Port River system would be captured by drifting into a trench next to the dumping area. They also assumed the *Caulerpa taxifolia* would remain in the trench until retrieved during calm weather. Unfortunately, if *Caulerpa taxifolia* does establish offshore from Adelaide there is no prospect of containing or eliminating the outbreak.

Risks by the government with the marine environment could indefinitely impact the Gulf's unique marine life. These risks could have unforeseen consequences on recreational users of the Gulf. Recreational fish could decline in numbers and the leafy seadragon, a favourite of divers and marine ecotourists, depends on seagrass beds.

This disregard toward international standards for marine conservation by the South Australian Government has motivated the 'Friends' to more emphatic responses toward government indifference.

The 'Friends' have also been encouraged by a recent initiative, which shows that there is willingness to apply the principles of integrated management to the Gulf. In February of this year, the Adelaide and Mount Lofty Ranges, Natural Resource Management Board, proposed a Memorandum of Understanding for collaborative approaches to the management of Gulf St Vincent by them and other local regional Natural Resource Management boards.

One significant activity of the 'Friends of Gulf St Vincent' that address this and other issues has been to organise forums on marine conservation issues with communities surrounding the Gulf. The 'Friends' format has evolved to include 3-4 speakers on subjects of general interest across the Gulf, with additional speakers addressing issues local to each forum's location. The 'Friends' also seek written feedback from forum audiences on issues. Summaries of these forums, and other news of the Gulf, appear in the 'Friends' newsletter 'Blue Swimmer', which has a wide distribution in both print and electronic form. Other organisations and individuals are further encouraged to circulate 'Blue Swimmer' through their own networks. All issues of 'Blue Swimmer' appear on the 'Friends' website - <http://users.chariot.net.au/~littoral/fogsv/>

The 'Friends' are updating a booklet 'Protecting Gulf St Vincent' which is directed to school students, particularly those taking units in environmental education. The 'Friends' are also compiling a book in the 'handbooks' series of the Royal Society of South Australia, the 'Natural History of Gulf St Vincent'. The 'Natural History of Gulf St Vincent' will be a 'must' for those interested in the natural history of the Gulf including general readers, marine naturalists and scientists. One interesting discovery is that the 'Friends' can reach many people through involvement with artists; including those who designed the flag that heads this article.

More info:

<http://users.sa.chariot.net.au/~littoral/fogsv/index.htm>