

Blue Swimmer

Newsletter of the Friends of Gulf St Vincent

February 2007

In this Edition

Welcome Aboard
FoGStV Forum and AGM
Money in the Sand Bank (Treasurer's report)
Christies: Can its' reef be saved?
Cheltenham "consultation" conclusion
President's report
GSV Poem
Josephine's Journal



Welcome Aboard

A warm welcome to our newest members:


John Cugley, George Apap, Peter Laffan, Robert Campbell, Tony Simmons, John Houlahan, Simon Holmes, Paul Hastings, John Caldecott, Bob Giles, Julie Wells, Sofia Wells, Neville Hudson, Linda Marie McDowell, Keith Jones, Paul Caica, Mayor of the City of Onkaparinga Lorraine Rosenberg, Corrie van der Hoek and Christies Sailing Club Inc.

If you are not a financial member and would like to become one please contact the treasurer Nick Crouch on Nick.Crouch@tafesa.edu.au or (08) 8372 6887. Membership fees are only \$10 per year for individuals and groups.



Friends of Gulf St Vincent Forum and AGM

In the absence of President Pat, Vice President Jim Douglas welcomed 35 participants to the Friends of Gulf St Vincent Forum held on 25th November 2006. On behalf of all, Jim acknowledged that we were meeting on the traditional lands of the Kurna people, who set their fish traps among the rocks at what we now call Second Valley, and lit the fires which Matthew Flinders recorded as "many smokes", when he sailed up this coast in 1802. Jim also introduced existing committee members who assisted throughout the day.



David Turner started his talk on reefs with acknowledgement of Tim Kildea and Grant Westphalen, who had contributed to the study, and to Alison Eaton, who was with us, and who had contributed the impressive pictures to this presentation.

David showed that local reefs could be placed into distinct categories, and then discussed the purpose of evaluating them. Apart from their contribution to productivity in our marine waters, reefs are 'valued' by people for their intrinsic interest or as places to go fishing. South Australian reefs are a significant part of the remarkable degree of biological diversity of our waters, including many endemic species.

David showed how the various values could be lost, most often through human impacts. He noted, as an example, that Horseshoe Reef had only recently shown signs of recovering from impacts from sediment released by dredging more than 8 years ago.

Most threats to reefs come from humans. Turbidity is a major threat, whether from disturbance close by in the sea for engineering works, or delivered to the marine waters from our greatly modified catchments. Reefs can also be in danger of being 'loved to death' - the many small impacts of too many visitors.

He then discussed a method to evaluate the 'health' - or current well being - of a reef. Considerations included 'tractability' - their ability to process information. The final agreed method reflected much practical experience diving on reefs, and delivered an index which could scale to 100 points.

The broad findings showed there were no local reefs which could be considered pristine. Generally, the closer a reef was to dense human settlement, the worse its condition was.

The 100 point system was reclassified down to a 'red, amber and green' grading. There were very few 'green' rated reefs (i.e. those in relative good condition) along the metropolitan coast, although they were generally better in the south compared to those in the north. Two particularly robust reefs were at Hallett Cove, and the northern portion of Noarlunga Reef. They seemed more capable than most of withstanding or recovering from human impacts.

David noted the significance of 'Reefwatch' as an organisation which can promote the cause of healthy reefs, and which had contributed to this study.

Robert Baldock suggested that his talk might be titled 'Betwixt and Between' the tidal ranges. His chosen area was that part of the coast between the spring high and spring low tides. We are indebted to Tony Flaherty for a quick explanation that the 'spring' in the name comes from the need for springs on moorings in the era of sailing ships.

Robert's diagrams demonstrated the local phenomenon of 'dodge' tides, the periodic lack of apparent tidal movement in a day, which make reefs in the South Australian gulfs more accessible to human activity.

Another interesting observation was the significance of local catchments in delivering sand to beaches on the eastern side of the Gulf.

The physics provided was necessary to understand what determined the mix of organisms on particular coast forms. Robert identified representative species for different bands of tidal

exposure on hard and soft substrates and how their form and distribution was also shaped by interaction with other (non human) organisms.

The audience had risen beyond 40 when Tony Flaherty took the floor to describe what the Adelaide and Mount Lofty Ranges Natural Resource Management Board was attempting to do for the marine environment. Tony remarked that environmental deterioration on land was fairly obvious to many observers, whereas knowledge of deterioration in the water was restricted to regular divers, and even they could see only a small part of the bottom of the Gulf. So it was easier to mobilise public support for rehabilitation of degraded sites on land, and the obvious progress helped maintain the effort on e.g. catchment management.

Further in that comparison, some of the causes of deterioration in the marine environment were not as obvious as on land. Divers could not be intuitively aware of increased local nutrient loads - it often required systematic observation or experiment to show that nutrients had serious impacts on seagrasses, for example. In that particular case, having identified nutrients as the problem, people did not instinctively think of the Penrice soda ash plant as the biggest single source of excess nutrient, the ammonia that was released to the river from the Solvay factory process.

Similarly, gradual loss of light penetration due to turbidity or increased colour in the inshore waters was not always obvious to the human eye, however deleterious it might be to the important photosynthesizers in the ocean.

Tony did note that having NRM board areas based on land catchments meant that their boundaries dissected the major gulfs - an outcome inconsistent with the principal of integrated natural resource management. The solution to this was the proposal for a marine plan for Gulf St Vincent. The plan for Spencer Gulf had provided practical experience in that process.

In preparation for an integrated plan, AMLR Board had established an advisory body on coast and estuary issues, convened by Dr Anthony Cheshire. The Board would also take up the marine environment in its regional 'state of the environment' reporting, and would include accessible marine areas in its environmental resource mapping.

Geoff Fisher brought us further ashore, to focus problems from changes in surface runoff to the Gulf. He took us through the fundamental physics, in much the same way Robert Baldock had, so we understood that, prior to European settlement, water had traveled slowly across the surface, with ample opportunity to soak into the soil, which filtered the water to a high standard. These principals still apply today. The best method by which to slow and filter water is vegetation.

Secondary principles are to treat surface flow as close as possible to its source. This could be done on different scales in and around houses, and across public lands. It was good practice to use a range of methods in any area, rather than rely on one method which may not be wholly effective in different rainfall patterns.

Geoff then brought the audience to the local quarry, which he observed as a hang glider pilot. There had been two major attempts to treat the runoff problem of the quarry, and it was 'not there yet'. Rule of thumb experience suggested that it needed a much larger treatment area to bring water to the appropriate quality, and allow it to infiltrate. The outlet was likely to fail in the kinds of rainfall that could be expected for this area.

The solution was to revegetate - but properly. Making sure that plants actually established and survived.

Geoff's message was 'We know what to do - '.



Rob Tucker included contributions from Doug Fotheringham (on seagrass) and Brian Caton (climate change) in his presentation, which started with an overview of the current strategy for the 28 kilometres of sandy beaches along greater Adelaide.

Interesting snippets include that the cost of managing sand for the new 'harbours' around Glenelg is about the same as the cost of all other beach maintenance, which manages about 160 000 cubic metres of sand each year.

Those 'harbours' have driven change within the new strategy. Sand accumulated in a series of 'cells' at each blockage to long shore drift, and the strategy is to recycle sand, as much as possible, within each cell.

Sand movement is still largely a function of prevailing wind set, so most sand moves during the summer south easterly breezes.

Sand is lost to the beach system faster than it can be replenished naturally, and the Board has to buy

in about 25 000 cubic metres of sand each year.

The objective of the seagrass program is to restore the inshore meadows that have been lost over the last 60 years. In the long term this will require substantial improvement in water quality, but that is no reason not to refine experiments and trials in the meantime.

Loss of seagrass has accelerated loss of sand, so the actual habitat has changed in some coastal areas, but Rob reminded the audience that sand was only ever a kind of 'veneer' over relatively hard bottom along much of the metropolitan coast.

Trials have identified *Amphibolis* as a promising early coloniser of bare areas. It seems to meet that function in nature, and is aided by small anchors that develop on seedlings. These can be helped to settle by fixing fabric such as hessian to the bottom to catch the seedlings as they wash about.

The observations on climate change, which came from Brian Caton, suggested that coastal planning should allow for a possible rise in mean sea level of 0.3 metres over 50 years. This could cause beaches to recede between 5 and 30 metres, which would impact significantly in some developed areas.

The southern metropolitan coast still had some natural defences - such as the shingle banks at Moana and Sellicks. These had been depleted for landscaping supplies, but probably were better left where they were, providing a natural dissipator to wave energy along that coast.



The session on local issues was lead by Peter Laffan, who was supported by John Houlahan and Rex Manson.

Peter set out the objectives of local action groups, who covered the coast from Field River to Aldinga Bay, and hoped to provide a communications bridge from community to 'decision makers', wherever they might be.

Peter nominated the future of the Port Stanvac refinery site as a major local issue, and expressed his disappointment that information about the site was being kept confidential by Government.

Comment from the audience remarked that, on casual observation, much of the vegetation and inshore waters were in relatively good condition, probably because there were few human visitors. Conversely, the shore did have a high litter load.

Peter's second area of contention was the Tingira Reserve above O'Sullivan Beach. This was valuable open space, but Council regularly received approaches from developers seeking to establish businesses there - which they proposed as being 'in the public interest'. The amalgamation of 3 former Councils into what is now Onkaparinga Council had required some settling in, partly because that Council covers 10% of the population of the state. Local people were now hopeful the area would not be alienated.

Peter's third current concern was the Onkaparinga Estuary, specifically the former sludge ponds, which appeared to be leaking to the river. Certainly there is an identifiable trail in samples taken between the ponds and the river, with high levels particularly of ammonia. Apparently the ponds were to close in 2009, but there was no clear plan on how they might be treated after that.

John Houlahan gave the audience a succinct overview of the dismal history of the attempts to rehabilitate the local quarry, and to treat problems that have become apparent at the landfill of the former ravine dump site.

Local people were concerned at the results of test drilling which found asbestos and considerable gas emission - including carbon monoxide. They were also disappointed at what they saw as official denial of links between the former dump and the current problem.

Lorraine Rosenberg, newly confirmed as Mayor of Onkaparinga, who had returned to the forum from other official duties, told the meeting that she did not know what position Council had previously committed to on this site, but it seemed to her that there may have been some mistakes, and she would review the entire matter.

John invited the audience to accompany him on a field inspection of the landfill and quarry.

Rex Manson - now also a local Councillor - spoke on his experience with catchment management for Christie Creek. Years of steady persistence had delivered a high-level task group to bring the catchment plan forward. This should include a sedimentation basin to the west of Dyson Road, which could almost halve the sediment load in most conditions. Other parts of the plan could harvest more rainwater for use on local land.

Chair Jim Douglas thanked speakers with wines from the special bottling of 'Friends of Gulf St Vincent'.

Through the day members of the audience filled out 'feedback' sheets. These have many uses - often we are able to use comments from our fora in submissions on larger issues, such as the current Parliamentary Inquiry into Coastal Development.

At this forum, about one quarter of our audience handed in comments. These consistently mentioned concerns about siltation and seagrass, and the need for effective management of stormwater. Particular observations included one person who remarked that she had seen degradation in the coastal and marine environment just in the last 10 years, and another person who pointed out that there was no prospect of an end to the need for beach sand management, so this was a perpetual, and high, cost.

Under the question 'Are we missing things that are important', suggestions include getting more actual input to marine planning, getting involved more directly with Port Stanvac, and - interesting one - perhaps setting up a kind of roadshow to spread our message to local government and similar bodies. This suggestion is interesting because the 'Friends' has a kind of roadshow on managing stormwater across the Adelaide plains. It was developed as a presentation to City of Charles Sturt, and includes graphs and diagrams within a fairly tight presentation. While we would not claim to have been the sole influence on City of Charles Sturt, that Council subsequently passed a strong resolution to move to active, multi-purpose management of these waters.

'Other things' people wanted to tell us included suggestions to have fewer speakers and more time for discussion at these fora. There were several compliments for the food (and we agree!). One member wondered why people tend to be submissive, rather than asserting their rights as citizens, and one of the audience thought our newsletter was not inviting to read. We are pleased to have all those comments, along with others that were simple compliments.

Annual General Meeting

We try to keep all meetings short and, we hope, interesting. Salient points from the AGM were

Apologies - President Pat Harbison. Heather Wright, Claire Petherick, Minister John Hill, Lee Grigg, John and Erika Lawley, Wendy Fowler, Kym Richardson MP, Barb and Dean Reid, Linda-Marie McDowell, Sue Poulton and Cathy McMahon.

Twenty-one persons signed as present for the AGM.

Vice President Jim Douglas read the President's report - which is set out in full later in this issue. Treasurer Nick Crouch could not be present for this AGM. The financial statement also is set out in this issue of 'Blue Swimmer'.

As a (then) non-member, John Houlahan graciously served as returning officer for elections. Results are as follows: -

President - Pat Harbison

Vice-President - Jim Douglas

Secretary - Ian Kirkegaard

Treasurer - Nick Crouch

Committee - Andrew Winkler, Scoresby Shepherd, Melanie Rees, Gayle Grieger, Angela Gackle, Paul Hastings, John Cugley, Peter Laffan and Robert Browne

It is particularly pleasing to see five new committee members. To help introduce them: -

Angela Gackle has been involved with the SA Museum and community groups in the Henley/Grange area.

Paul Hastings is Coast and Marine Facilitator with the Conservation Council of SA.

John Cugley has long experience in water quality research and management, nationally and in South Australia.

Peter Laffan's background is in establishing community groups, most recently in the Aldinga area.

Robert Browne is nominee for the Inshore Fish Group.

So we have acquired people with wide experience, and look forward to their ideas and other help in our commitments for 2007.

We thank John for presiding over this part of the day. After some other procedural matters, the meeting closed in good time for John's excursion to the quarry.

Ian Kirkegaard

Money in the Sand Bank

Courtesy of Envirofund we have recently received a \$15,435 grant for the upcoming revised edition of the Gulf St Vincent Booklet. This makes our current financial situation look very healthy indeed with a balance of \$16296.92. It must be remembered though that the majority of this is earmarked for the design and production of the booklet, leaving us with \$861.92.

It should also be noted that some membership subscriptions are currently outstanding, so if you have not yet done so, please contact me (Nick.Crouch@tafesa.edu.au or 8372 6887) to arrange payment.

Nick Crouch

Christies: Can its reef be saved?

A public consultation and information night was presented by the Christie Creek Task Force of the Adelaide and Mount Lofty Ranges Natural Resources Management Board on Wednesday 6th of December. Don Hopgood, chair of the taskforce, chaired the evening which attracted 60 attendees. Speakers included Professor Anthony Cheshire and Steven Gatti, technical manager of the taskforce, who provided a snapshot of the catchment and the proposed sedimentation basin and other on ground works. Their presentations are available at www.amlrnrm.sa.gov.au.

The Taskforce objectives include assessing the future of Christies Creek, preparation of a report to Cabinet and a public document outlining the direction for protection of the reefs, seagrasses and marine environs.

Horseshoe Reef, amongst other southern reefs, were slammed in 1997 by a new sand dredge used for metropolitan sand replenishment capable of transporting 25,000 cubic metres of sand per day; a ten fold volume increase, resulting in a devastating entrained suspended solid plume. In Professor Cheshire's opinion Horseshoe and inside Noarlunga Reefs have not recovered from this event.

Professor Cheshire views the Christies Creek as a microcosm for the whole of the Adelaide coast. The implementation of measures decided by the resource management plan can be transferred to other southern catchments such as Field Creek and the Onkaparinga River, effectively using this Integrated Natural Resource Management Plan as a blueprint. The ultimate test of this plan is that failure would lead to ongoing loss of seagrasses and further decline of middle and southern reefs.

He identified two current key problems:

- the major impact on reefs is through high sediment load arising from outfalls to the marine environment via transport of suspended solids along the Christies Creek and stormwater outfalls.
- the major impact on seagrasses is by high wastewater nitrogen levels from the local sewage treatment facility.

A vision of the taskforce is to affect zero discharge of treated sewage wastewater to the marine environment by 2015, a policy focus on managing stormwater quality, emphasis on low level turbidity, cease industrial and wastewater discharge and emphasis on water reuse and implementing aquifer storage and recovery.

the *Blue Swimmer*, which has recently reached its 8th Edition.

Activities for the past year are summarised below.

The Arts:

The Friends joined with SALA in a celebration of Gulf St Vincent, which comprised some very successful projects carried out in conjunction with the City of Charles Sturt including: -

- o Fishing box workshops for children from local primary schools, run by, Jim, Ian, Richard Smith and Gary McGillivray, culminating in an exhibition of the decorated boxes at the Grange community centre
- o Unveiling of the Sea Eagle sculpture, made by Kangaroo Island Sculptor Indiana James for the City of Charles Sturt, at the seaward end of Grange Road on 5th August.
- o The launch on the same day of our new Friends of Gulf St Vincent flag, representing the shape of the gulf with our emblem of the Blue Swimmer crab

Submissions:

We made submissions to the appropriate agencies on the following issues which we believe threaten the health of the gulf: -

- o Dredging Outer Harbour
- o The Inquiry into Coastal Development
- o Pt Wakefield Marina proposal
- o Adelaide Shores Marina development
- o Cheltenham race course development
- o Maslins quarry 'rehabilitation'
- o Trials of the 'sand shifter'
- o Flushing of cyanobacterial blooms from Torrens Lake to Henley Beach

Presentations and forums:

Forums and meetings included another community forum held at Pt Vincent in July, with eight speakers on the gulf ecology, plus films from the 'Beyond the Coast' series.

We attended two public meetings at Semaphore on the dredging at Outer Harbour and a public meeting at Maslins on the quarry problem.

Presentations were given to the City of Charles Sturt on urban runoff and the need for retention basins, which resulted in the Council resolving to map all areas of land which may be suitable for stormwater retention. A presentation was also provided to the Gulf St Vincent inquiry, held by Federal Labour MP's.

Jim and Ian informed teachers of local gulf issues

on a bus tour of the metro coast in November.

Representation:

We were invited to send representatives to the Torrens Task Force Reference Committee, EPA Round Table and a meeting on northern coastal development held at Middle Beach

Fundraising:

We were invited to share a Quiz night with WACRA, which provided a very welcome boost to our funds. We have also been fortunate in receiving help from both local and Federal governments during the last year

The Flag:

We received a small grant to design and make a flag to celebrate Gulf St Vincent, and the final product was flown outside the hall during the AGM. This flag is available to all by filling in the order form in edition 8 of our Blue Swimmer newsletter, or on the website. Flags have already been purchased by five coastal councils, two local MPs and a coastal resident. We hope that eventually community groups sailing clubs and local councils all around the gulf will fly the flag for Gulf St Vincent. We have already received some orders for the next run, which will sell at the very good price of \$70 each for a 1m long flag

A meeting room:

The City of Charles Sturt has generously allowed us to use its well equipped Grange Community Centre on Military Rd for our committee meetings at no cost.

New edition of GSTV book:

Our most recent successful grant application has been to publish a new edition of a community information booklet called Protecting Gulf St Vincent. Two of our committee members were involved in the original publication by the EPA, which has given us permission to update the contents and publish a new edition of 2000 copies for distribution to schools and community groups around the gulf.

So, overall, the Friends of Gulf St Vincent have had a very busy and rewarding year, and we would like to acknowledge all of the people who have worked so tirelessly since our last AGM, helping us to increase community knowledge, awareness, and commitment to protect our very precious Gulf St Vincent.

Pat Harbison

Encounter Marine Park Regional Consultative Committee

The Encounter Marine Park Regional Consultative Committee is about to enter its second term and subsequently members of the public can nominate for the reappointment of the committee. The committee will continue to assist the South Australia Department of Environment and Heritage (DEH) in the development of a management plan for the proposed encounter Marine Park.

If you would like to consider nominating for the committee further information can be obtained via the DEH website (www.environment.sa.gov.au/coasts/latest_news.html#encounter_marine) or by contacting DEH on (08) 8124 4900 for a copy of the terms of reference.

Nominations should be received before 23rd February 2007 and sent to:

Committee Nominations
Coast and Marine Conservation Branch
Department for Environment and Heritage
Reply Paid 1047
ADELAIDE SA 5001
Email: marineDEH@saugov.sa.gov.au

GSV

Gulf St Vincent
is a pond of dolphins...
of salt grass meadows...
of silver-streak fish...
and razor shells

Gulf St Vincent
turns gray and green
gold and blue, and mauve,
with the rays of a day

Gulf St Vincent
bathes ancient sands...
carves statue rocks...
sprays coastal shrubs...
and steers boats home

Gulf St Vincent
is tide insistent
is a force resistant
is with me this instant...
and always.

JL Baker

Josephine's Journal: upcoming events around the Gulf

For more information about Friends of Gulf St Vincent please contact the secretary; Ian (ianrk@iprimus.com.au). To add your event or workday to Josephine's Journal, contribute an article, photo or snippets of information contact Mel (0418 802 816, melanie-rees@lycos.com).

Future events:

When	What	Further Details
February		
2 nd – 8 th	World Wetlands Week	http://www.deh.gov.au/water/wetlands/day/
March		
Fri 2 nd	Schools Clean Up Day	http://www.cleanup.com.au/au/GetInvolved/schools-clean-up-day.html
Sun 4 th	Clean up Australia Day	http://www.cleanup.com.au/au/GetInvolved/clean-up-australia-day.html
4 th – 10 th	Seaweek "Marine Bycatch matters"	http://www.mesa.edu.au/seaweek2007/default.asp
22 nd	World Day for Water	http://www.ozgreen.org.au/WWD.htm

