

SILVERLEAVES CONSERVATION ASSOCIATION INC.

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NEWSLETTER

September 2024



UPDATE ON SILVERLEAVES EROSION



Photo Christine Irving

The foreshore erosion has worsened recently with the late August storms, particularly at Sanders Road beach. Since 2022 erosion has accelerated and at Sanders Road over 12 m to 16 m of foreshore has been lost in two years.

COASTAL PROCESSES STUDY

The Silverleaves Coastal Processes Study prepared for the Department of Energy, Environment, and Climate Action (DEECA) by consultants FSC Range was released at a well-attended community meeting held at Berninnet on Friday 30 August. The report is available online with a community survey and consultation open until 27 September.

https://www.marineandcoasts.vic.gov.au/_data/assets/pdf_file/0019/716050/Silverleaves-Coastal-Processes-Study.pdf

In summary, the western shoreline of Silverleaves has eroded about 77 metres since 1953. The groynes and other measures have affected the sand migration from the west entrance of Western Port Bay, past Erehwon Point, along Cowes East to Silverleaves and out to Cowes bank.

The report theorises a cause for the hotspot erosion at Sanders Road beach is the smooth design of the new nearby 2022 Cowes east rock walls, as well as the associated “relatively inefficient” groynes that “reduce the amount of sand available further downstream.”

The report also states terminal erosion at the eastern most revetment that was constructed in 1977 has led in the decades since its construction to erosion, scouring, and reorientation of the shoreline at Silverleaves. “Erosion appears to have accelerated after construction of the revetment in 1977 and removal of the groyne field in this area sometime between 1985 and 1989.” Furthermore, analysis indicates “upstream revetments and previous timber seawalls have contributed to scour in the nearshore area” and “that historic sand scraping (bulldozing) may also be a contributing factor”.

It states “Recent beach nourishment efforts have proven to be sacrificial and are not considered a sustainable long-term solution for mitigating this erosion. “Further analysis indicates that existing interventions like groynes, while preserving beach amenity and retaining sand locally at East Cowes, impedes natural sediment supply to downstream areas such as Silverleaves”.

The report notes that the recent acceleration at Silverleaves is due to groynes at Cowes East not being filled with appropriate grade of sand/sediment upon construction and after each storm event that empties them. The wall that was built should not have used smooth rock as this enhances wave action and increases sand migrating offshore to Cowes bank or further down towards Rhyll. The report recommends that groynes at Cowes east should be filled each time they are emptied, and the wall be modified.

The report suggests sea level rise is coming faster than previously predicted, with the foreshore erosion assessment results indicating that at Silverleaves, significant loss of coastal reserve, private property, and public assets is possible within the next decade if nothing is done to stop it. The report concludes that by 2050 all frontline homes along Silverleaves may be submerged and by 2100 homes in about 150 metres from the current shoreline could have been breached. If the rate of erosion continues, the projections are grim.

The report does not give immediate solutions, except to say that there should be planned adaptation. Even if action is agreed upon, it seems there is no budget allocation at local, state or federal levels, with no precedent for funding to protect private property.

The next step is to investigate short term protection actions, which might include further sand nourishment (bulldozing sand) to the groyne fields. Medium to long term the report recommendations are to develop sustainable, long-term adaptation pathway and coastal management strategies beyond sacrificial beach nourishment efforts.

According to the Marine and Coastal Policy, adaptation solutions are: (1) non-intervention, allowing marine processes to occur; (2) avoid locating new developments; (3) natural methods such as vegetation; (4) accommodating changes such as building for impact of flooding; (5) retreat away; and (6) protect through physical barriers.

<https://www.marineandcoasts.vic.gov.au/marine-coastal-management/marine-and-coastal-policy>

Community consultation on the Coastal Processes Study report is now open and the SCA encourages you to complete the survey which closes at on 27 September 2024. <https://engage.vic.gov.au/silverleaves-coastal-adaptation-pathways>

The findings will be presented in November and an “adaption pathways” report released in February 2025. Community consultation on this report is

then expected to run in March and April 2025. In May the findings from the community consultation will be released, before a final adaptation plan is released in July 2025.

This raises a number of concerns for Silverleaves residents as we can expect inundation due to rising sea levels in the next 25 years from both the foreshore and the Rhyll inlet. Do we continue to build structures to protect the environment and home, how much will this cost and who will pay for it? How do we improve the resilience of the foreshore, which could include suitable revegetation works to retain sand? Should further housing development be halted because of the future risks? And what does this mean for the value of our properties? Or are we facing a worst-case scenario in the future of retreat and advocate for government buy backs? We face an uncertain future and the Silverleaves we know, and love is changing.

SILVERLEAVES COMMUNITY MEETING

The SCA invite you to join us for a free coffee and a chat and an opportunity to meet your neighbours.

**Anerie (Silverleaves Store)
Sunday 13 October at 9 am.**

We know that many Silverleaves people are very passionate and concerned about the future challenges and threats to our Silverleaves environment. The SCA is reaching out to seek people’s views and keep you up to date with key developments. We welcome your suggestions and encourage you to become involved in the protection of our natural environment.

THE WEATHER

It has been the warmest August on record with little rain and an early spring. Storms lashed Philip Island in late August, with a recorded high wind gust of 62 knots/115 KPH at the Cowes Yacht Club. August recorded 16.4mm of rain, well below the average August rainfall of 77.4mm.

Winter’s total was 114mm. This time last year Candowie Reservoir was 100 per cent, but last week it was at 70 per cent.

WEATHER AND CLIMATE CHANGE

Over the past 5 years to 2021, climate change and extreme weather events have highlighted the vulnerability of human society; ecosystems and biodiversity, including freshwater and marine systems and other natural resources. Climate change affects temperature and weather patterns, increased frequency and severity of extreme events, and other climate-related changes such as sea level rise are all having profound effects.

<https://soe.dcceew.gov.au/overview/pressures/climate-change-and-extreme-events>

STORM EVENTS AT SILVERLEAVES

The recent storms saw many trees and branches blown over at Silverleaves. A big thanks to the Bass Coast Shire Arborist team and the SES who were busy with chainsaws clearing the roads and properties.

For severe weather-related emergency assistance such as fallen trees on your house or car, damage to your roof or flooding call the **SES, phone 132 500**.

If a tree comes down over the road, please report it to Bass Coast Shire as soon as possible. You can log your request directly through the Bass Coast Shire website. The customer request portal can be accessed through the 'Contact Us' section of Council's website at www.basscoast.vic.gov.au/contact.

The online portal provides customers with a direct link to Council, 24 hours a day, seven days a week, to report issues across a number of areas.

STORM SAFETY AT SILVERLEAVES

When storms are forecast be prepared stay indoors, check on your neighbours and stay safe. Charge mobile phones, laptops and portable back-up batteries and check you have enough batteries for torches.

If you've lost power, turn off and unplug sensitive electronic equipment like televisions and computers to avoid power surge damage once the power is restored.

Beware of fallen powerlines and stay at least 10 metres away from any fallen powerlines and anything in contact with them. Widespread power outages can impact mobile phone reception. This is to do with the short life of back-up batteries at mobile phone bases, which draw the same amount of power as 10 houses. If the power is off long enough, mobile reception starts to fail.

TREE REGISTER

Former head of Burnley horticultural college Dr Greg Moore spoke at a Phillip Island Conservation Society event in July, saying a tree-lined street added an average \$30,000 to the price of a house and said the community should fight to preserve significant trees.

A large tree provides habitat for 2000 other species, from fungi and bacteria to larger species. Trees stabilise the soil, remove pollutants and help stop flooding. Research has found in terms of carbon, to replace one old oak would take 48,000 seedlings. The Bass Coast Shire have launched the online tree register and an urban forest officer has been employed to develop assessment guidelines and oversee the register of trees on public land, and private landowners can nominate trees on their own property worthy of inclusion. Any tree on the register will be protected under local laws.

SMALL TREES SUITABLE FOR SILVERLEAVES

If you have lost a large tree during the storms and are looking to replace it with something smaller, consider these local and indigenous smaller trees.

Sweet Bursaria *Bursaria spinosa*, 2-6m
Coast Wattle *Acacia sophorae*, 1-6m
Swamp Paperbark *Melaleuca ericifolia*, 2-9m
Coast Wattle *Acacia sophorae*, 1-6m
Coastal Tea-tree *Leptospermum laevigatum*, 2-8m
Prickly Tea-tree *Leptospermum continentale*, 1-4m
Boobialla *Myoporum insulare*, 1-4m
Swamp Sheoak *Allocasuarina paludosa*, 1-2m

BUSH STONE-CURLEWS



Image source <https://ebird.org/species>

The bush stone-curlews will again be seen in the wild on Phillip Island, with the first release of 12 of the critically endangered birds in August into Oswin Roberts Reserve, wearing little GPS backpacks so they can be tracked. Over the next three years up to 60 birds will be released.

The bush stone-curlew is a ground dwelling, nocturnal bird with prominent yellow eyes, grey, brown colouring on its upper region with a white belly and black streaks. Known for its long legs and resounding call, bush stone-curlews were once found throughout most of Australia and were last seen on Phillip Island in the 1970s before becoming extinct due to foxes. Their main threats now are feral cats, birds of prey, cars and powerlines. It is critical for island residents to follow the 24-hour cat curfew, with two feral cats caught in Oswin Roberts Reserve recently.

Details: penguins.org.au/conservation/education/nature

SPRING AT SILVERLEAVES

Many plants are flowering early, attracting the birds and wildlife, and wildlife begin their breeding season. You will hear the Kookaburras, Magpies, Lorikeets, the noisy Wattle birds and if you look closely, you will see Blue Wrens, Firetails and the Southern Yellow Robin.

Spring is when migratory birds such as Curlews, Sandpipers, Godwits, Knots, Stints and Pied Oyster Catchers return to the Rhyll Inlet after a long journey of over 12,000 km from Arctic breeding areas. Hooded Plovers and Red Capped Plovers also return to our beach to breed.

Silverleaves is home to many echidnas, and they will be out and about in spring as it is mating season. Reptiles such as copperhead snakes, skinks and lizards emerge from hibernation and bask in the sun. If you see a snake, keep your pets inside and allow time for it to move on, or call a qualified snake handler if you are concerned.

Spring is a great time to be in the garden and plant some native plants; they are low maintenance, and drought tolerant and so require little water. They also provide habitat for native birds, butterflies, bees, lizards, and other insects. With habitat disappearing at an alarming rate across the Island, you can provide a wildlife oasis for them to thrive in.

You can buy indigenous plants suitable for the sandy soils of Silverleaves at the Barb Martin Bushbank Nursery, 1810 Phillip Island Road. Open Wednesday, Thursday, Saturday and Sunday from 9am – 3pm.

BIOLUMINESCENCE

This natural phenomenon occurs when there is lots of bioluminescence in the water, usually from a non-toxic algae bloom of plankton. The sea will glow when it's disturbed by a wave breaking or a splash in the water at night. It can happen at any time of the year but its more common in the warmer months and with a calm sea.

The editor experienced bioluminescence many years ago at Silverleaves beach, so next time you are on the beach at night, stir the water and see if the magic happens.



Image source

<https://www.environment.sa.gov.au/goodliving/posts/2018/04/sea-sparkle>