Helping local government
build stronger communities.

Joint Committee on Harmful Algal Blooms in South Australia

Submission

17 October 2025

lga South Australia

This submission to the Joint Committee Inquiry on Harmful Algal Blooms in South Australia has been prepared together with the Adelaide Coastal Councils Network (ACCN) and South Australian Coastal Councils Alliance (SACCA).

Recommendations

LGA South Australia, ACCN and SACCA seek a comprehensive, coordinated approach to avoid, mitigate, respond to, recover from, and build resilience to future algal bloom events, and asks the government to:

1. Continue South Australia's decarbonisation efforts to reduce greenhouse gas emissions and, in turn, ocean warming
2. Recognise a harmful algal bloom as a hazard and identify a Hazard Risk Reduction Leader and a Control Agency to coordinate response for algal blooms in the State Emergency Management Plan and subsidiary strategies and plans
3. Provide clear science-based communications to communities and stakeholders
4. Support the recovery of ecosystems, economies and communities from the algal bloom, supporting funding to coastal councils and a support package for various coastal initiatives, including coastal infrastructure
5. Develop and deliver a Community Wellbeing and Resilience Framework to support the social and mental health of affected communities
6. Provide funding for long-term coastal and marine biological and ecological monitoring and extend water testing across the state
7. Provide ongoing funding to reduce nutrient discharge to coastal, estuarine and marine waters.

LGA, ACCN and SACCA request the opportunity to address this submission at the public hearing.

ACCN Adelaide Coastal Councils Network

SOUTH AUSTRALIA COASTAL COUNCILS ALLIANCE

Contents

About us

LGA South Australia

At LGA our purpose is to help local government build stronger communities.

As the peak body proudly representing 68 councils across South Australia and the Anangu Pitjantjatjara Yankunytjatjara, we champion the needs of our members every day.

Working for our members, we represent the interests of local government at both state and federal levels and provide robust and innovative solutions to local challenges.

Whether it's policy development, coordination on important issues or training and development, our work is about empowering local government to deliver a real, lasting impact for South Australians. Our trusted services also include tailored cover and risk services for the sector, and access to pre-qualified suppliers and panels to save councils time and money.

With a focus on leadership and representation, our work is driven by a shared passion for making a difference in the lives of the communities.

Adelaide Coastal Councils Network

LGA is a member of the Adelaide Coastal Councils Network (ACCN), which is the collective voice for seven Adelaide metropolitan coastal councils. These councils work in partnership with LGA on coastal planning and management.

The ACCN is committed to advocacy, knowledge sharing and collaboration, and the proactive, contemporary and sustainable management of Adelaide's metropolitan coastline, with a strategic focus on delivering:

- coastal adaptation
- resilient and sustainable coastal infrastructure and built environments
- flourishing catchments and coastal ecosystems and
- thriving coastal communities.

South Australian Coastal Councils Alliance

SA Coastal Councils Alliance (SACCA) provides coordination, collaboration and advocacy support for 26 South Australian coastal councils and their communities. SACCA provides an informed, coordinated advocacy voice and a forum for information sharing and networking on coastal management issues facing regional councils across South Australia.

SACCA's mission is 'to provide strong leadership, support and advocacy for the benefit of all South Australian coastal Councils and their communities'. SACCA works closely with LGA and ACCN on coastal issues.

Background

Since it was officially confirmed at Waitpinga and Parson beaches on the Fleurieu Peninsula in mid-March 2025 the algal bloom has grown to spread across approximately 4,400km^2 across South Australian and Commonwealth Waters, including in Investigator Strait, Gulf St Vincent, Spencer Gulf, south of Kangaroo Island and Southeastern Coastal Waters.

The bloom contains harmful algal species, not least *Karenia mikimotoi,* that have severely impacted marine life and the industries that depend on a healthy ocean, especially fishing, aquaculture, and tourism. It has also had a significant impact on coastal communities and the councils that support them across the state, including on the Fleurieu Peninsula, Kangaroo Island, Eyre Peninsula, Yorke Peninsula, Limestone Coast, and Adelaide metropolitan region.

While the state has experienced blooms in the past (e.g., Coffin Bay, 2014), it has never experienced one on this scale.

Discussion

LGA South Australia, ACCN, SACCA and coastal councils, in collaboration with the State Government, are working hard to ensure that the short-term impacts of the bloom are effectively managed, that business and communities are supported, and that communities emerge from this catastrophic event more resilient and better prepared for future events.

While the short-term environmental, economic and social impacts are currently quite overwhelming for some councils and their communities, it is important to create/provide hope for the future. As such, this submission calls for all levels of government to continue tackling climate change and ocean pollution - key drivers of harmful algal imbalances - and to commit the necessary resources to support communities and councils to recover from this

bloom, and to invest in research, innovation, and the long-term resilience of marine and coastal ecosystems and our communities.

LGA South Australia, ACCN and SACCA represent all 34 coastal councils in South Australia who, together with the SA Government, work closely on coastal and climate related issues. For example, LGA's $3.7m SA Climate Ready Coasts Program, funded through the Australian Government's Coastal and Estuarine Risk Mitigation Program, with support from the Local Government Research and Development Scheme and Coast Protection Board, is delivered through a partnership with the Department for Environment and Water (DEW), ACCN and SACCA, to improve coastal hazard adaptation planning in SA.

The collaboration between state and local government is also evident in ACCN, SACCA, the Mayor of the Kangaroo Island Council and CEO of Yorke Peninsula Council being a part of the State Government's Algal Bloom Stakeholder Reference Group.

Coastal councils take pride in their coastal areas which provide enormous community, lifestyle, wellbeing, environmental, scenic and economic value and benefits. The algal bloom continues to have significant environmental, economic and social impacts on these communities and the wider South Australian community.

It is critical that councils and their communities are supported in the response to and recovery from this event. Further, it is vital for all parties to invest in initiatives that build the resilience of oceans to climate change.

Submission report

This submission to the Joint Committee Inquiry on Harmful Algal Blooms in South Australia has been prepared by LGA, ACCN and SACCA.

The Terms of Reference for the Inquiry are included at Appendix 1.

The causes of the algal bloom

It is understood that the causes of the bloom are:

1. A Marine Heatwave (MHW) with water up to 2.5°C warmer than normal from September 2024.
2. Long periods of consistently low winds, calm seas and clear skies that promoted the growth of the bloom during the heatwave conditions.
3. nutrient sources provided from the die-off and break down of seagrass and seaweeds across South Australia due to the MHW, from River Murray floodwaters in 2022-23 and a cold-water upwelling in summer 2023–24 (acknowledging that some scientists do not think the last two sources were major contributors to the bloom)

4. Habitat loss and degradation that have left our marine ecosystems less able to cope with environmental stressors like the algal bloom.

Impacts of the algal bloom

The thirty-four coastal councils in SA report significant environmental, economic and social impacts from the algal bloom, including:

- Environmental impacts:
    - the death of thousands of species of fish and shellfish and some mammals. Unlike a marine disease, which tends to target just one species, this event has resulted in the deaths of over 550 species of fish and marine invertebrates.
    - damage to benthic cover, such as habitat-forming hard bottom / shell species, sponges and heavier reef species (that do not often wash up), and habitat-forming marine plants.
- Economic impacts (as evidenced by the interest in government grants):
    - the closure of some commercial fisheries and aquaculture
    - a reduction in recreational fishing
    - reduced community confidence in purchasing SA seafood products
    - less visitation to coastal areas for recreation and tourism, and the knock-on impacts on coastal (e.g. accommodation, eateries, shops) and coastal-related businesses (e.g. seafood and fishing tackle stores). For example, the Yorke Peninsula Council has reported up to 40% decline in visitation to its council area and the associated economic contribution for hospitality, tourism and local service businesses. Every 10% drop in tourism during peak visitor times (warmer months) equates to a $25m impact on the local economy.
    - reduced seafood consumption in hospitality businesses
    - councils initially incurring costs to clean-up beaches. For example, to date, one metropolitan Adelaide council had to remove 190 tonnes of dead marine life and associated seagrass at a cost of $36,000 and they are expecting this to increase, noting that these costs are now reimbursed by the state government.
    - councils being asked for rates relief/deferment based on the economic impacts of the bloom operational impacts
    - council field and customer service teams have absorbed increased workload, responding to public enquiries and maintaining beach safety and cleanliness.
- Socio-cultural impacts from:
    - eye, skin and respiratory irritation in humans due to bloom foam aerosol
    - allergic responses in dogs and illness from eating dead fish

- distress due to air quality and water quality at beaches and the sight of marine animals on the beach
- reduced physical and psychological wellbeing due to disruption of leisure activities (e.g. walking on the beach, surfing, recreational fishing)
- general loss of coastal amenity and quality of life
- reduced hours/loss of income/job loss from impacts on local businesses
- grief over losses and anxiety about the future (eco anxiety).

The algal bloom is causing severe distress and anxiety to coastal communities and the wider SA community, especially (according to media reports) First Nations Peoples who have strong cultural connections to waters.

It is also important to note that that the full extent of impacts from the algal bloom may not be immediately evident, and:

- coastal and marine ecosystems might take many years to recover (if they do recover)
- fisheries may not recover for many years as fish recruitment is being impacted
- businesses along the coast may not realise the full impact of economic downturn until after peak visitor periods in 2026
- markets may not recover until confidence is restored and
- the broader mental health impacts may not be known for many years.

Responses must consider the various lead/lag times of the many complex and interrelated impacts.

Coastal councils have been active

Coastal councils acted swiftly to support communities through the algal bloom. Key actions include:

- daily beach inspections, clean-ups and disposal of organic waste by council field teams (before the State Government took the lead on these)
- installation of signage and safety messaging on beaches
- engaging with community members on the beach and at council facilities
- real-time community updates (e.g. Algal Bloom Updates: Support For Our Beaches | City of Charles Sturt
- proactive social media communication to manage concerns
- amplification of state government information
- council-initiated community information sessions and their promotion
- hosting state government community forums
- business liaison and support via councils' economic development teams

- monitoring and reporting of public enquiries, with significant spikes in community concern logged across July to September.

Financial and resource implications

The algal bloom has placed significant unplanned resource demands on coastal councils, including increased field team deployment, beach inspections, public safety messaging, and customer service response. Coastal councils absorbed these frontline responsibilities without a formal emergency-style funding mechanism during the initial response.

Federal and State Government support

Given these wide-ranging and devastating impacts, and the resource impost on coastal councils, LGA, ACCN and SACCA have welcomed the Federal and State Government's combined $136.75 million in funding and other resources to help SA to respond to the algal bloom, including:

- a minimum of $28.25 million for scientific research into the bloom
- $20.6 million for shellfish and seagrass restoration
- a minimum of $19 million to activate coastal spaces including through removing dead marine life from beaches, beach patrols, updating the BeachSafe app, grants for clubs and providing mental health support
- a total of $10.1 million in direct funding to local government for grants to assist those local communities who are dealing with these challenges and for a coastal infrastructure grants program and a coastal event grants program
- significant business support grants and recovery services to help impacted businesses manage the effects and plan for recovery
- significant cashbacks, travel vouchers and tourism marketing to support coastal tourism and hospitality
- public information campaigns, the official algal bloom website and hotline, community forums and signage
- the Commonwealth adding a new stream, for significant ecological events, under the Regional Investment Corporation fund, a multibillion-dollar fund that provides support to farmers to manage drought, to provide longer-term support for farmers (including shellfish farmers) to manage events like marine heat waves and algal bloom.

Key issues identified

1. *It is likely that climate change is the primary cause of the bloom.*

   A Marine Heatwave (MHW) some 2.5C above normal temperatures is likely the main cause of the algal bloom and we know that such events are likely to become more frequent and enduring under climate change.

   There is also research evidence overseas showing that increased acidity (dissolved CO_2) promotes the growth and possibly increases the toxicity of Karenia blooms. Thus, increased ocean acidity over time could favour the growth of harmful algal blooms.

   It is acknowledged that the State Government has existing commitments to reduce net greenhouse gas emissions, achieve net zero emissions by 2050, and achieve 100% net renewable electricity generation by 2027.

2. *The need for robust planning and governance.*

   The algal bloom has revealed that the state was unprepared for such a large-scale event. Councils and communities bore the burden of the resource-intensive early response activities such as communication and beach cleanup and there was no clear lead agency to coordinate response causing confusion.

   Responsibility was initially dispersed across DEW, Department of Primary Industries and Regions (PIRSA), Environment Protection Authority (EPA) and SA Health, which led to inconsistent messaging and management.

   There was reluctance to treat the event as an emergency, which limited the ability to activate funding or State-led coordination (it is acknowledged that the State Emergency Management Plan (SEMP) does not identify Algal Bloom as a hazard and there is no appointed Control Agency).

   Planning and governance arrangements took a while to embed. Establishment of the Department of Premier and Cabinet (DPC)-led Algal Bloom Coordination Unit, using arrangements and structures like the state emergency management arrangements (which are known and understood by agencies) facilitated a coordinated, multi-agency response.

   The bloom was predicted to dissipate with the onset of winter with cooler water temperatures, stronger winds and storm activities bringing waves and turbulence. When that did not occur, the state government secured and mobilised funding and/or resources relatively quickly, and convened the Algal Bloom Cabinet Taskforce in July closely followed by the various advisory and working groups, including the Stakeholder Reference Group of which the ACCN and SACCA are representees.

In the absence of proven emergency management arrangements being activated, the new planning and governance arrangements took time to be embedded. Through the Stakeholder Reference Group and other working groups, SACCA ACCN and LGA provided feedback on the adequacy of these arrangements and welcomed the eventual DPC-led approach across government in a coordinated manner (like arrangements under the SEMP).

LGA, ACCN and SACCA consider the use of SEMP-type arrangements that are widely understood and well-practised as appropriate and indeed that they have improved the management of and messaging on the bloom response.

In August (five months after the algal bloom was detected), PIRSA took a lead role in coordinating clean-up activities. Then late in August, DPC was appointed as lead agency. This greatly improved overall coordination of clean-up activities and provided greater focus and leadership on broader issues e.g. research, economy, health and tourism.

Local government is represented in the DPC Algal Bloom Clean-up Incident Management Team, and each impacted coastal council plays a key role in clean-up activities along with other state government coordinated resources (e.g. DEW, Disaster Relief Australia and external contractors).

3. *The need for clear, science-based communication.*

Misinformation and media speculation about the causes of the bloom event has caused significant confusion and likely impacted coastal tourism and businesses, and coastal-related business, such as fish retailers and fishing tackle stores.

Inconsistent access to environmental health data from State agencies has limited councils' ability to respond confidently to community concerns and residents continue to ask councils questions about:

- safety of swimming, dog walking, and exercising at the beach
- health impacts from smell and airborne exposure
- risk of contamination of inland waters, such as the Port River and West Lakes.

Trusted, science-based information on algal blooms is important to counter misinformation and alternate theories on the algal bloom, support councils to provide accurate information to their communities, and increase and maintain confidence in seafood safety, support tourism, and the viability of local businesses during and after such events. It also gives communities the confidence in the commitment of all levels of government to support them and manage this crisis, which is important for the mental health of coastal communities and the wider South Australian community.

It is appreciated that the State Government:

- consolidated information on the algal bloom from DEW, PIRSA, EPA and SA Health on a one-stop Algal Bloom website and improved public messaging on the bloom, including via consistent beach signage and on traditional and social media
- has held and continues to hold public forums for impacted coastal communities around the state
- now holds Local Government briefings (via Teams) every Friday, as advocated for by SACCA, ACCN and LGA.

4. *The need to support the recovery of ecosystems, economies and communities from the algal bloom.*

The bloom has already had a devastating impact on coastal and marine ecosystems, industries dependent on them, coastal-based and coastal-related businesses, and coastal communities and the wider South Australian community, and the impacts are likely to get worse if the bloom persists into Spring and Summer. It may take a long time for ecosystems, economies and communities to recover from the bloom and there will need to be measures to support their recovery.

It is acknowledged the Federal and State Governments have invested in industry support and financial counselling for commercial fishers, aquaculture farmers and 'eligible' small businesses, however some impacted businesses are not eligible for such funding (such as fuel stations, butchers, cafes, bakeries and so on).

It is also appreciated that the State Government proposes to develop a Recovery Plan to guide the recovery of ecosystems, industry, tourism and community health over the medium to long term. LGA, ACCN, SACCA and coastal councils seek input into this plan given they will have a role in implementing it.

5. *The need to support community wellbeing and resilience.*

The algal bloom has had a significant impact on the wellbeing and resilience of coastal communities and the wider South Australian community.

in addition to the distress caused by the immediate impacts, there are widespread reports of people having a profound sense of loss and grief about the future (i.e. eco anxiety).

It is appreciated that the Federal and State Governments have invested in mental health support and workforce advice for small businesses impacted by the harmful algal bloom, and is proposing to provide additional mental health support for communities.

The Public Health Monitoring Strategy proposed in the Summer Plan could including mapping of mental and physical health impacts that will be useful for SA in the future, referencing population health data and social health determinants.

6. *The need for long-term monitoring, modelling and further research to understand the causes of algal blooms.*

Further research is needed to understand the causes of the bloom, bloom dynamics, ecosystem level effects, the impacts on species, the impacts on fisheries, aquaculture, tourism, and coastal communities, potential mitigation measures, and potential recovery and restoration measures.

Early MHW and bloom detection, and the ability to track the movement of algal blooms and the impacts on water and air quality, is critical to ensure we are better prepared for future bloom events.

It is critical that we develop better understanding of the health of coastal and marine ecosystems, track changes over time, and inform evidence-based responses to climate change, marine heatwaves, and harmful algal blooms.

It is appreciated that the Federal and State Governments have allocated a minimum of $28.25 million for scientific research into the bloom.

It is also acknowledged that the Algal Bloom Innovation and Regeneration Challenge, promoted by some mayors of coastal councils and with seed funding from the Local Government Research and Development Scheme, is seeking to leverage private investment to develop innovative solutions to algal blooms. As well as seeking to create a solutions pipeline of innovative technologies not available through traditional procurement, the Challenge seeks to:

- Instil Public Confidence: Demonstrate decisive government action on environmental crisis
- Achieve Global Recognition: Showcase SA's innovation leadership ahead of COP31 talks
- Attract Investment: Draw international investment and expertise to SA
- Transfer Knowledge: Build local capacity through collaboration with global experts
- Create a Replicable Model: Create exportable solutions for other Australian states and international markets.

7. *The need to build the resilience of coastal and marine ecosystems.*

Living reefs dominated by Australian flat oysters were common in South Australia's gulfs and bays in the 1800s, spreading across 1,500 km of coastline. Today, no reefs of this kind remain, mainly because of the impact of historical fishing, dredging, water

pollution and disease. These lost reefs once functioned as natural filters, absorbing excess nutrients that found their way into the ocean.

There is also evidence that seagrass meadows host a bacterium that kills it.

Restoring SA's shellfish reefs and seagrass meadows would restore the important filtration services that the reefs once provided to help mitigate future harmful algal bloom events, as well as increasing biodiversity, blue carbon and fish productivity, and potentially reducing coastal erosion.

It is appreciated that the Federal and State Governments propose to invest $20.6 million for shellfish and seagrass restoration.

What we seek from the State Government

A comprehensive, coordinated approach to avoid, mitigate, respond to, recover from the current algal bloom event, and build resilience to future harmful algal bloom events. Noting the work already underway and what is proposed in the Summer Plan, LGA, ACCN and SACCA recommend:

1. *Continue South Australia's decarbonisation efforts to reduce greenhouse gas emissions and, in turn, ocean warming*

   While the amount of greenhouse gas emissions already in the atmosphere, even if we were to reduce GHG emissions today, mean MHW events are, to a certain extent 'baked in', the State Government should seek to avoid making climate change, and particularly MHW, more frequent and intense, by continuing its commitment to:

   - reduce net greenhouse gas emissions by at least 60% by 2030
   - achieve net zero emissions by 2050, and
   - achieve 100% net renewable electricity generation by 2027.

   The State Government should also continue to strongly advocate for carbon mitigation/decarbonisation nationally and internationally.

2. *Recognise harmful algal blooms as a hazard in the State Emergency Management Plan and subsidiary strategies and plans.*

   LGA, ACCN and SACCA recommend amending the State Emergency Management Plan (SEMP) to incorporate:

   - Algal Bloom as a hazard with an assigned Hazard Risk Reduction Leader as per Section 5A(3)(b) of the *Emergency Management Act 2004* (the Act)
   - a designated Control Agency for Algal Bloom as per Section 20 of the Act

- a designated Support Agency or agencies as per section 9.3 of the SEMP
- a designated Functional Support Group or groups as per section 9.4 of the SEMP and
- a broader description of what constitutes an emergency in terms of an event's 'consequences' rather than being confined to a particular hazard type as per section 6 of the SEMP.

This would capture other future unprecedent events that have also not been specifically listed in the SEMP. In addition to listing hazard types such as fire, flood or algal bloom, part of the definition of what constitutes a disaster or emergency would relate to the damage caused to environment, ecosystems, communities and economy, and so where an incident occurs that involves a new/ unprecedented or unlisted hazard, the definition can be used to identify if it is an emergency and which agency might be the Hazard Risk Reduction Leader and which agency might be the Control Agency.

If there was a consequence-based definition of what constitutes a disaster or emergency, it would make it clearer to SA Police that they can apply the existing SEMP responsibility under section 9.1.2 of 'making a determination when it is unclear as to which agency at an emergency should be in control' and which organisations should be Support Agencies or Functional Support Groups.

3. *Clear science-based communications to communities and stakeholders*

Real-time, science-based updates on the detection and movement of an algal bloom, water quality, beach safety and seafood safety and State Government activities related to the bloom, on the government's Algal Bloom website as the single point of truth, and across traditional and social media.

LGA, ACCN and SACCA could help amplify such messaging via member councils.

4. *Support the recovery of ecosystems, economies and communities from the algal bloom*

- Supporting the restoration of ecosystems and the recovery of impacted fish stocks through funding to restore impacted habitats (as proposed) and protect surviving populations of affected species, including fishing bans as necessary
- Supporting economic recovery through, for example:
    - ensuring the eligibility criteria for business support grants to capture all businesses in coastal and near coastal communities that have been impacted by the HAB and a downturn in visitation (such as fuel stations, butchers, cafes, bakeries)

    - boat fee relief to encourage boating and fishing
- Supporting community recovery through funding for councils for activities.

It is noted that Federal Government has allocated its $4 million in direct funding to local government for grants to assist those local communities which are dealing with these challenges, and the Federal and State Governments have allocated $6.1 million for a coastal infrastructure grant program and to support coastal events. LGA has been in discussions with the Algal Bloom Coordination Unit about the allocation of the $4 million and has recommended:

- $2 million be allocated for general funding of coastal initiatives, to be made available to all coastal councils and used at their discretion based on priority needs
- $2 million to be allocated to merit-based applications from councils to deliver:
    - coastal protection initiatives
    - community development initiatives
    - coastal infrastructure initiatives

With regard to the proposed coastal infrastructure grant program, LGA supports investments in coastal infrastructure, including showers, shelters, BBQs, boat ramps and fishing facilities, which all contribute to community amenity and visitor experience.

In addition, LGA, ACCN and SACCA advocate for:

- an expansion of the State Government Coast Protection Board's 'Coast Protection Grants' from $1 million per annum to at least $2 million per annum to support councils better manage and protect South Australia's valuable coastal assets and address climate change risks
- renewed investment in jetties via an expansion of the State Government's Jetties Renewal Program to help deliver sustainable recreational jetties into the future

5. *Develop and deliver a Community Wellbeing and Resilience Framework to support the social and mental health of affected communities.*

The framework should recognise the significant psychological, social, cultural, and economic impacts these events can have on individuals, families, and communities, (especially First Nations communities), particularly those whose livelihoods and identities depend on healthy marine ecosystems, and include:

- embedded, locally delivered mental health services
- peer support networks
- targeted workforce-retention initiatives
- long-term resilience planning for coastal communities.

6. *Provide funding for long-term coastal and marine biological and ecological monitoring and extend water testing across the state*

Long term coastal and marine biological and ecological monitoring and baseline data collection

The Great Southern Reef Foundation is a not-for-profit charity run by an independent team of science, media and education professionals working to promote the recognition, stewardship and long-term health of Australia's kelp forests. Frequently Asked Questions | Great Southern Reef

The Foundation has argued for sustained State Government investment in permanent coastal and marine biological and ecological monitoring and baseline data collection, covering the Great Southern Reef and other key habitats, building on existing commitments and integrating with national observation networks.

This funding should provide the ecological baselines needed to measure change, assess impacts of marine mortality events, and track recovery or restoration success, modelled on the Great Barrier Reef Foundation funding arrangements, ensuring it does not place additional financial burdens on affected industries or local governments.

The Great Southern Reef Foundation has estimated that such monitoring would cost in the order of $46 million over ten years. A national baseline dataset will support both environmental protection and the sustainability of dependent industries such as fishing, aquaculture, and tourism.

Extending water quality testing across the state

Consideration should be given to extending water quality testing to additional locations and to seeking to enlist fishers and community groups to undertake the water testing and uploading the results to the SA Algal Bloom Water Sampling Dashboard.

Scientists cannot be everywhere, whereas people are on beaches across the state each day, are invested in them and the health of coastal and marine waters and want to 'do something'. Funding to build citizen science capacity through, for example, training and education of community members as well as the purchase of technology (such as microscopes1) would enable such testing to be extended across the state at a

[1] Estuarine Ecologist, Faith Coleman, advises that such water testing can be done by anyone with a suitable microscope that can cost as little as $1700.

relatively low cost and have the added benefits of improving the mental health of participants and, by publishing the data, potentially the wider community.

7. *Provide ongoing funding to reduce nutrient discharge to coastal, estuarine and marine waters*

   SA's coastal councils are increasingly on the frontline of climate change-related events. For example, this winter alone there have been three major storm events coinciding with high tides, which have caused significant storm damage to public infrastructure, private property and natural coastal environments, and the recovery costs exceed many councils' financial capacity. The algal bloom is another climate-related event that has only added to the impacts on coastal communities and the pressure on coastal councils.
   Considering these events, and noting that the State Government proposes to invest $20.6 million in shellfish reef and seagrass restoration, LGA, ACCN and SACCA call for further investment in grey and green infrastructure (e.g. stormwater, wastewater) to reduce nutrient and dissolved carbon pollution discharge to terrestrial waters (including the Murray River) and, in turn, to coastal, estuarine (including the Coorong) and marine waters.

Conclusion

South Australia's current algal bloom event has caused unprecedented environmental, economic and social impacts to coastal communities and the wider community.

LGA, ACCN and SACCA welcome the Federal and State Governments' funding and resources to help SA to respond to the algal bloom and acknowledge the agility of the South Australian Government and coastal councils to respond to and recover from the current event.

LGA, ACCN and SACCA consider South Australia's current algal bloom event a climate-related hazard and call for a comprehensive, coordinated approach to avoid, mitigate, respond to, recover from the current event, and build resilience to future algal bloom events.

In summary, LGA, ACCN and SACCA request the government:

1. Continues South Australia's decarbonisation efforts to reduce greenhouse gas emissions and, in turn, ocean warming
2. Recognises a harmful algal bloom as a hazard and identify a Control Agency to coordinate response for algal blooms in the SEMP and subsidiary strategies and plans
3. Provides clear science-based communications to communities and stakeholders

4. Supports the recovery of ecosystems, economies and communities from the algal bloom, supporting untied grants of $2 million to coastal councils and a $2 million support package for coastal initiatives
5. Develops and delivers a Community Wellbeing and Resilience Framework to support the social and mental health of affected communities
6. Provides funding for long-term coastal and marine biological and ecological monitoring and extend water testing across the state
7. Provides ongoing funding to reduce nutrient discharge to coastal, estuarine and marine waters.

As Professor Martina Doblin, director of the Sydney Institute of Marine Science, said: *"We cannot just treat this as a one-off event that should be monitored. This is a complex problem and we need a coordinated science–industry–governance response"*.

The current bloom is an indicator of the future as the climate continues to change, increasing the frequency, extent and duration of extreme weather and environmental events including algal blooms. California, for example, has experienced major harmful algal bloom events in 2015, 2022, 2023, and 2024.

Further State Government investment to help South Australia to respond and recover from the current event would be an investment in the State's capability to respond, recover from, and build resilience to, such blooms in the future.

LGA, ACCN and SACCA welcome the opportunity to work with the State Government as a trusted partner to support South Australian councils and their communities through this crisis, and to emerge from this event better prepared and more resilient for future events.

Appendix 1

Joint Committee on Harmful Algal Blooms in South Australia

Terms of Reference

A Joint Committee has been appointed to inquire into and report on the harmful algal blooms in South Australian marine and coastal environments, with particular reference to:

(a) Contributing environmental, land management or water quality factors;
(b) Ecological, economic, cultural and social impacts of algal blooms including impact on community health and wellbeing;
(c) The cultural and economic impacts on Indigenous communities, including any loss of access to cultural practices;
(d) The coordination of state government responses, including agency responsibility, industry engagement, scientific advice, and public communications;
(e) The current support and recovery arrangements for impacted industries and communities;
(f) The adequacy of long-term monitoring, forecasting and prevention strategies;
(g) The adequacy of research funding, rehabilitation and recovery planning;
(h) Any other related matters.

Helping local government build stronger communities.

GPO Box 2693
Adelaide SA 5001
T (08) 8224 2000
E lgasa@lga.sa.gov.au

lga.sa.gov.au

lga. South Australia