

KIAMA LOCAL STRATEGIC PLANNING STATEMENT Technical Paper Five Environment

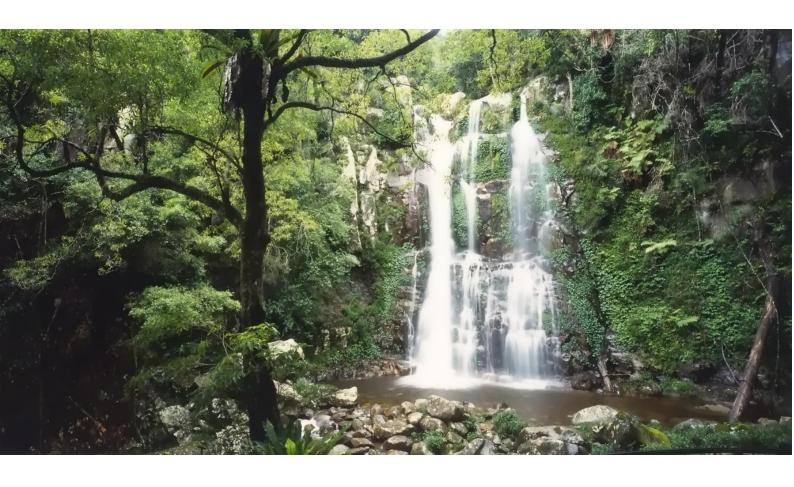












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Kiama Local Strategic Planning Statement - Technical Paper Five - Environment

Key Emerging Environment Policy Outcomes

- Maintain biodiversity and corridor mapping to inform land use decisions
- Protect environments from sand mining at Gerroa and Dunmore
- Protect sensitive coastal wetlands
- Update hazards mapping and policies
- Continue to support sustainable waste management
- Local climate change and adaptation policy
- Continue to protect the Sydney Drinking Water Catchment
- Promote the use of renewable energy

1.0 Purpose

Kiama Council has started the process of developing a local strategic planning statement (LSPS) that will set out:

- a 20 year vision for land use in the local area
- the special characteristics which contribute to local identity
- shared community values to be maintained and enhanced
- how growth and change will be managed into the future.

Once the LSPS is in place, it will shape the comprehensive reviews of the Kiama Local Environmental Plan 2011 and the Kiama Development Control Plan 2012. It will also provide a solid foundation for the review of Council's Community Strategic Plan that is scheduled for 2020-21.

Engaging with the community and stakeholders about values and priorities for Kiama is a key input into the development of the LSPS.

Through November 2018, a number of workshops were held to:

- To inform the community and stakeholders about the LSPS
- Identify key community issues and values
- Develop a preliminary high level strategic vision/narrative for the Municipality
- Prioritise the key themes and responses that will guide more detailed analysis and provide a framework for the development of the Statement.

2.0 What did the Kiama community say about the environment?

The community values the unique natural landscapes and colours of Kiama – from the deep green biodiversity of the escarpment, through to the agricultural pasture lands and rolling green hills of the coastal landscape and earthy hues of the coastaline and deep blue of the ocean.

The community wants to see the natural environment and open spaces retained and protected and for Kiama to be sustainable place that embraces renewable energy and smart technology and that responds to the challenges of climate change.

3.0 What does the Community Strategic Plan say about the environment?

The LSPS has a strong relationship with the Kiama Community Strategic Plan (CSP). It needs to be consistent with the existing CSP but importantly, it can provide context and new policy ideas to be considered in the next CSP which will be finalised by September 2021.

Objective 1 of the CSP is "A healthy, safe and inclusive community" which includes a commitment to three key strategies including the following:

- 1.1: Developing and implementing services and programs that promote social cohesion, healthy and active lifestyles for residents of all ages, abilities and interests.
- 1.2: Planning for and assisting specific needs groups
- 1.3: We live in a safe community

Objective 2 of the CSP is "Well planned and managed spaces, places and environment" which includes a commitment to five key strategies including the following:

- 2.1: Maintain the separation and distinct nature of local towns, villages and agricultural land
- 2.2: Our community and natural environments are adaptive, resilient and sustainable and informed of predicted climate change impacts.
- 2.3: The principles of ecologically sustainable development and compliance underpin town planning and local development.
- 2.4: Effectively manage our waste and resources.
- 2.5: Effectively manage our transport, drainage and other infrastructure and assets.

The Delivery Program and Operational Plan provide details about the strategies and activities that will achieve these CSP priorities. Some of the initiatives to support these objectives include:

- Educate members of the community on sustainable food and gardening practices.
- Promote Council and community health and sustainability events, information and activities.
- Protect and maintain productive agricultural lands through ensuring Council's statutory and policy documents contain necessary framework.
- Implement actions identified within Coastal Management Plans.
- Undertake and support on-ground activities and biodiversity education to enhance natural areas.
- Operate Community Recycling Centre.

4.0 How does the Illawarra Shoalhaven Regional Plan apply?

The LSPS is required to be consistent with any strategic plan applying to the area. The Illawarra-Shoalhaven Regional Plan is the overarching regional policy document guiding strategic land use planning in the region.

We have highlighted the following policy areas that are particularly relevant to the environment in Kiama

Action 5.1.1 – avoid, minimise and mitigate the impact of development on significant environmental assets. Councils are expected to use a range of mapping tools including the high environmental value map and high environmental values criteria, when undertaking strategic planning and developing planning proposals.

Action 5.1.2 – protect high environmental value land at Seven Mile Beach, Gerroa notes that this area has both potential sand resource and high conservation values. As a response to the significant impact that extraction of sand would have on the sensitive habitat and ecological values, the NSW Government made a commitment to retain the area zoned E2 Environmental Conservation under the Kiama LEP 2011, which prohibits further sand mining.

Action 5.1.3 – protect the regions biodiversity corridors in local planning controls is concerned with looking for opportunities to improve the functioning and resilience of corridors in strategic planning. Biodiversity corridors provide important links between coastal parks and forests, and the hinterland. Maintaining and improving these corridors will protect and enhance the ecology of the region and the movement of plants and animals.

Action 5.1.4 – create a consistent approach to protect important riparian areas involved the NSW Government reviewing riparian management outcomes to achieve greater consistency and certainty in the way they are applied in planning and development controls.

Action 5.2.1 – apply contemporary risk management to coastal and other hazards is about incorporating the best available hazard information to build resilience to natural hazards. Councils are required to review and update floodplain risk and coastal management plans, particularly where new growth opportunities may be affected by natural hazards.

Action 5.3.1 – develop long term waste-management capacity as population and development increases. The NSW government wishes to work with councils and the Illawarra Shoalhaven Joint Organisation to develop a long term capacity to manage waste as the population and development of the region grows.

Action 5.4.1 – protect sensitive estuaries and coastal lakes. A higher level of management intervention is needed to protect, maintain and/or restore the water quality and ecological condition of sensitive estuaries and coastal lakes. Spring Creek and Werri Lagoon have been identified as sensitive and need to be protected from the potential effects of development.

5.0 Is our mapping of biodiversity and corridors up to date?

The Office of Environment and Heritage has reviewed the biodiversity layers, including biodiversity corridors that are contained in the LEPs of each local government area in the region. The review has confirmed that there are no anomalies in the Kiama LEP 2011.

While the overarching Terrestrial Biodiversity layer is current, all identified biodiversity is contained within a single mapping layer. There are opportunities for Council to undertake further research relating to the classification of vegetation values that would enable refinement of the mapping layer to identify areas of 'high environmental value'. This would provide further protections to important vegetation communities across the LGA.

In Kiama, the Illawarra Biodiversity Strategy identified biodiversity corridors in the areas of the:

- Minnamurra coastal wetland,
- Dunmore hard rock resource
- Saddleback Mountain through the Kiama Bends
- Seven Mile Beach Reserve and Crooked River
- Length of the escarpment vegetation running generally north-south.

Office of Environment and Heritage has also reviewed the planning framework applying to riparian lands in Kiama and has advised that no action is necessary. While the mapping and riparian

clauses currently within the Kiama LEP 2011 are appropriate, changes to the wording of clauses may change over time and would need to be updated when and if necessary.

Kiama will continue to meet the requirements of the relevant environmental and planning legislation to ensure that development is undertaken in a manner sensitive to both environmental values and community expectations around the maintenance and improvement of these environmental values.

6.0 Are the high environmental value lands at Seven Mile Beach still protected against expansion of sand mining?

An application to modify the existing consent to mine sand at the Gerroa Sand Quarry, referred to as the 'Sand Quarry Extension Modification' is currently being assessed by the Department of Planning, Industry and Environment.

Council made a submission to the exhibition of the proposed modification raising issues relating to disturbance and management of acid sulfate soils; accuracy of documentation; the implications of land mapped as E2 being included in the proposal; compensation for loss of vegetation; monitoring of surface and groundwater; impact on areas of archaeological and cultural significance; mitigation of potential noise impacts; mitigation of visual impacts; and flood impacts.

Council will continue to manage the Seven Mile Beach Reserve for its biodiversity value and undertake bush regeneration and maintenance activities across the reserve in conjunction with the Seven Mile Beach Landcare group, in line with commitment agreed as the trustee land manager with Crown Lands.

7.0 What are we doing to protect our identified sensitive coastal wetlands?

A higher level of management is needed to protect, maintain and/or restore the water quality and ecological condition of sensitive estuaries that are susceptible to the impacts of land use development. In Kiama, Spring Creek and Werri Lagoon are listed as sensitive estuaries that are susceptible to land use impacts. These estuaries were identified as they met characteristics associated with flushing, dilution capacity and retention of runoff.

7.1 Coastal Zone Management Plans

Council has two certified Coastal Zone Management Plans (CZMPs), for Minnamurra River and Crooked River. The development of the CZMPs included review of the previous estuary management plans and looked at any new data which could provide a current picture of the health of the estuaries. The CZMPs also developed and set out a number of management actions across areas including catchment inputs, aquatic and terrestrial biodiversity, estuary processes, cultural heritage and community uses, to assist in maintaining and improving estuary health and condition.

The Coastal Management Act will continue to recognise these authorised Coastal Zone Management Plans until December 2021. After that time the Plans will need to be reviewed and updated to comply with the requirements of a coastal management program as stipulated in the Coastal Management Manual.

At this point it would be beneficial for Council to consider preparing a scoping study for both Minnamurra and Crooked Rivers, as well as Werri Lagoon, Spring Creek and other smaller estuaries within the Kiama LGA. This study would be used to develop a Plan for Minnamurra River, Crooked River and the other estuaries and ICOLLs (Intermittently Closed and Open Lakes and Lagoons) within the local government area.

7.2 Spring Creek

Updating the Plan of Management that currently applies to Spring Creek is scheduled for completion in mid-2021.

Council currently actively maintains the Spring Creek Reserve under guidance from the Spring Creek Plan of Management. Tree planting activities occur annually through National Tree Day activities and vegetated areas of the reserve are maintained on a schedule by Council's bush regeneration staff.

Council has commissioned research to inform the development of the proposed residential area to the north of the wetland area. This information will be utilised to develop the DCP and will also inform any legislative requirements to be met for the proposed development under the Biodiversity Conservation Act 2016 and the Coastal Management Act 2016 and Coastal Management SEPP.

Spring Creek is recognised under the Coastal Management Act 2016 as "Coastal Wetland", with associated buffer zones with considerations to be given from proposed developments.

Clause 11 of the Coastal Management SEPP, "Development on land in proximity to coastal wetlands or littoral rainforest", stipulates:

- 1) Development consent must not be granted to development on land identified as "proximity area for coastal wetlands", or "proximity area for littoral rainforest", on the Coastal Wetlands and Littoral Rainforest Area Map, must not be granted unless the consent authority is satisfied that the proposed development will not significantly impact on:
 - a) The biophysical, hydrological or ecological integrity of the adjacent coastal wetland or littoral rainforest; or
 - b) The quantity and quality of surface and ground water flows to and from the adjacent coastal wetland or littoral rainforest.

These principles and legislative requirements will all be addressed in the development of the proposed residential area.

7.3 Werri Lagoon

Werri Lagoon does not have an established estuary management plan or Coastal Zone Management Plan. Council endorsed the 'Werri Lagoon Interim Entrance Management Policy' in 2005, which set criteria for the management and artificial opening of Werri Lagoon to the ocean. The entrance management policy was only ever intended as an interim management plan, and as such would benefit from inclusion in the review of CZMPs with the intention to develop a CMP. This would include a study of the current condition and the estuary processes acting on the lagoon, any implications relating to alteration of the opening policy and the impacts of coastal hazards.

A flood study has been undertaken for the Ooaree Creek and Werri Lagoon catchment, and Council may decide to proceed to the development of a floodplain management plan, at which time the a review of the interim entrance management policy may also be considered for inclusion in the plan.

8.0 Are we prepared to manage risks associated with natural hazards?

8.1 Coastal Management Plan

Council is preparing a Coastal Management Plan (CMP) – a long term strategy for managing the coastline of the Kiama Municipality. Funding assistance from NSW Government Coast and Estuary Program is supporting this project.

The CMP will help identify risks to our coastal communities and establish ways of managing those risks.

The Plan will be prepared using the NSW Government Coastal Management Framework, including the Coastal Management Act 2016, State Environmental Planning Policy and the NSW Coastal Management Manual.

The preparation of the CMP includes extensive community and stakeholder consultant and involvement and is scheduled for completion in December 2021.

8.2 Bushfire mapping update

Council is due to review and update bushfire mapping consistent with current bushfire prone land mapping guidelines. We have had initial discussions with the Rural Fire Service about the process, including gaining access to the official data layers to inform our mapping review.

8.3 Floodplain risk management plans

The Floodplain Development Manual and the Flood Prone Land Policy guide local government in managing flood risk in their communities. The main objective of the Policy is to reduce the impact of flooding and flood liability on owners and occupiers of flood-prone property and reduce public and private losses. The policy recognises the benefits of use, occupation and development of flood-prone land.

The Floodplain Development Manual supports the policy and guides councils through the floodplain risk management process for the purposes of complying with Section 733 of the Local Government Act 1993. The manual helps councils develop and implement local floodplain risk management plans and outlines the technical assistance provided by the NSW Government and details the roles and responsibilities of various NSW agencies. It includes information on:

- the preparation of flood studies, floodplain risk management studies and plans
- floodplain risk management options
- flood planning levels and areas
- hydraulic and hazard categorisation
- emergency response planning.

Due to the combination of steep escarpment and flat coastal plains, many of the catchments in the Kiama LGA are susceptible to flash flooding. Flash flooding occurs when large amounts of rain fall during a short period, causing creek waters to rise quickly and with very little warning before water enters properties.

While a number of flood studies supporting specific developments (such as sewerage schemes, Princes Highway upgrades, individual building developments) have been completed in the past, Council is now working towards completing overall catchment wide flood studies to allow further floodplain risk management to be implemented.

To date, flood studies have been completed for the Surf Beach, Spring Creek and Werri Lagoon/ Ooaree Creek catchments as identified by the Kiama Catchment and Flood Risk Committee as a priorities. These were prioritised based on past urbanisation, increasing development potential in the lower catchment areas and reported existing flooding issues in these locations. Further studies are planned for the Minnamurra River and Munna Munnora catchments in the near future as grant funding permits.

9.0 What is Council's approach to waste management?

Kiama Council has been recognised as a leader in sustainable waste management and diversion of waste from landfill.

Council and residents have benefitted from the various waste services, programs and events all aimed at reducing waste going to landfill, increasing resource recovery including quality compost from our food and garden organics recycling.

With the introduction of our OK Organics Kiama waste service, which has resulted in a 40% reduction of waste going to landfill, we are now in a strong position compared to many other local government areas that are struggling to meet State targets within the required timeframes.

In addition, we have developed various waste initiatives in the context of State and Regional strategies and targets, to take us into the future. This includes events such as Second Hand Saturday, Household Bulky Waste Drop Off, Kerbside Clean Up Collection, Home Composting Workshops, our Community Recycling Facility, collaboration with local waste-focussed groups such as Kiama Boomerang Bags, Plastic Free Kiama and regional programs focussing on litter and illegal dumping.

With no landfill of our own, we continually strive to be at the forefront of developing and implementing waste strategies and initiatives aimed at reducing waste going to landfill. Our council has been acknowledged as the best performing in the IRIS database in terms of resident satisfaction with their food and garden organics waste service. In addition, we have received various State Government awards for our waste programs and initiatives.

Council continues to look at all waste services currently provided to its residents and aims to identify potential for improved resource recovery. We will focus on opportunities presented through innovation, new technologies and facilities and community education to continue to reduce the amount of waste we send to landfill and increase the value of resources being recovered and recycled.

We have:

- ✓ Achieved a 75% diversion of waste from landfill
- ✓ Provided solutions for household problem waste with the construction of the Community Recycling Centre
- ✓ Reduced incidence of litter with targeted community engagement programs
- ✓ Reduce incidence of illegal dumping with the implementation of the Household Bulky Waste Drop Off event
- ✓ Participated in regional contracts and services where appropriate

10.0 What are we doing to combat climate change?

In 2009, Council endorsed a regional climate change adaption strategy and action plan as a local policy. The plan includes detailed actions relating to planning and development, environment, community and corporate services, and infrastructure and services. Implementation of the prioritised actions required collaboration between local and State authorities.

More recently, the Shoalhaven and Illawarra Enabling Regional Adaptation (SIERA) report was released in June 2019 and contains an overview of the region's vulnerability to climate change and suggests adaptation actions.

The Region is expected to experience increase in all temperature variables, more frequent and intense storms and flooding, and increased fire risk. Impacts may include power outages, infrastructure damage, erosion, changes to plant growth, impact on vulnerable groups and financial cost.

The report identifies seven regional systems that are particularly vulnerable and in need of change to ensure effective ongoing government service planning and delivery:

- Satellite settlements (such as Jamberoo): would benefit from sustainable built environments, resilience to extreme climate events, integrated transport and community awareness
- Transport: reduced reliance on low occupancy motorised vehicles could be supported through public transport, alternative transport and telecommuting
- Emergency management: planning could better consider risk in development decision and there could be a greater focus on information and compliance
- Energy: investment into local generation (photovoltaics, water storage, storage battery) and scalable technology would reduce vulnerability and improve resilience to extreme climate events
- Food: security could be supported through appropriate land use planning and agile local food production
- Industrial transformation: may include investment into freight infrastructure, supporting marine based tourism and developing the knowledge services sector
- Water: securing potable water supply, clean and healthy water systems, the use of 'green' infrastructure and reliable sewerage systems all support healthy and safe water resources

Kiama has already identified a number of initiatives to mitigate and adapt to climate change including the mapping and protection of rural lands, use of renewable energy, sustainable urban design for centres and planning for hazards.

It may be beneficial for Council to bring these initiative together and consider additional areas for investment as a contemporary local climate change and adaption policy. This would be a refresh of the 2009 climate change adaptation strategy.

The Illawarra Shoalhaven Joint Organisation is actively engaged with the region's councils, including Kiama Council, in a number of environment, sustainability and climate change policy areas. These include current and potential programs relating to illegal dumping, litter, waste, climate change adaptation, biodiversity, renewable energy and community education. We will continue to collaborate regionally to ensure improved outcomes and efficiencies across these program areas.

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