



**Panel Submission
South Gippsland Shire Council**

**AMENDMENT C81 – LAND SUBJECT TO
INUNDATION OVERLAY**

Part A Submission

Hearing Date 23 & 24 February 2016

Submission by
South Gippsland Shire Council

1. INTRODUCTION

2. South Gippsland Planning Scheme Amendment C81 proposes to update the inundation controls on inland and coastal areas across the South Gippsland Shire. In accordance with the Panel's Directions, this is Council's Part A Submission that will consider:
 - The Strategic Background to the Amendment
 - Strategic Assessment (how the amendment addresses State and Local policy)
 - Identification of the issues raised in submissions and the response of Council and the WGCMA.
 - Any changes to the Amendment documentation proposed as a result of the issues raised in the submissions.
3. The Part B Submission will be presented to the Panel at the Hearing and will address all other matters set-out by the Panel in its Directions dated 23 December 2015.
4. In parts, this submission draws heavily on the discussion and recommendations of the Bass Coast Amendment C82 Panel Report which considered a similar application of the Land Subject to Inundation Overlay (LSIO) to inland and coastal areas. For the purpose of brevity, this submission does not seek to repeat at any length any issues or arguments where Council supports the recommendations of the C82 Panel and the Panel Report clearly sets out its reasons for its recommendations. The C82 Panel Report can be viewed on South Gippsland Shire's Amendment C81 webpage.
5. This submission does not query or seek to justify climate science or the impact of rising temperatures on sea levels and the rate at which these processes are occurring. This submission supports the State policy to plan for 0.8 metre sea level rise at the year 2100. This submission argues that this approach, which includes mapping the risk in the LSIO, is consistent with the precautionary principle.
6. Planning Scheme Changes Proposed by Amendment C81
7. The Planning Scheme changes proposed by Amendment C81 are:
 - Delete the ESO6 (Clause 42.01s 6) entirely from the Planning Scheme – maps and schedule.
 - Amend the current Land Subject to Inundation Overlay (LSIO) to:
 - Apply the LSIO to riverine waterways and adjoining land (floodplains) subject to inundation in areas currently within the ESO6.
 - Apply the LSIO to waterways and floodplains not currently affected by any inundation planning controls.
 - Improve the mapping accuracy of the existing application of the LSIO in coastal and some inland areas.
 - Apply the LSIO to coastal areas not currently affected by inundation planning controls. The coastal LSIO includes mapping of climate

change related sea level rise and storm surge impacts (estimates) at the year 2100.

- Replace the existing LSIO Schedule with a new Schedule as exhibited, however with minor changes to be recommended to the Panel.
 - Make minor changes to the Municipal Strategic Statement to acknowledge the updating of the inundation mapping and changes to the LSIO schedule provisions.
 - Includes as a Reference document in the Planning Scheme the 'Corner Inlet Dynamic Storm Tide Modelling Assessment – Water Technology June 2014'.
8. It is to be noted that the current LSIO mapping of the Bass River and its tributaries is not affected by Amendment C81. The Bass River LSIO (in Melbourne Water's catchment west of Korumburra) was introduced in March 2011 by Amendment C55. The Amendment received no objections. The new LSIO Schedule proposed by Amendment C81 will apply to the Bass River LSIO area. Melbourne Water support the proposed new LSIO Schedule.

9. HISTORY OF AMENDMENT C81 (SUMMARY OF KEY DATES AND DECISIONS)

10. Amendment C81 has a long history, which it is beneficial to briefly review for the purpose of demonstrating the time, resources and importance Council has invested in this process.
11. The West Gippsland Catchment Management Authority (the CMA) provided Council updated flood mapping in 2010. The mapping was of inland waterways based on a 1% AEP standard. The mapping did not consider coastal inundation.
12. The most significant benefit of the updated mapping is that it provides justification on which Council can remove the existing ESO6 (Areas susceptible to flooding). The ESO6 was an interim control introduced into the pre amalgamation planning schemes and subsequently translated into the South Gippsland Planning Scheme. The ESO6 mapping was prepared by the Floodplain Management Unit of the former DNRE. Due to the absence of technical flood information, the ESO6 was mapped to cadastre boundaries and resulted in the control being applied to large areas of land that will never be subject to flooding. The inaccurate application of this control has been an ongoing burden on landowners and Council for more than 20 years and has generated many hundreds of planning permits of little or no benefit.
13. At its Ordinary Council Meeting on 28 September 2011 Council resolved to use the CMA's updated flood mapping to prepare a planning scheme amendment to remove the ESO6 and roll the flood controls into the LSIO. This decision was taken shortly after Amendment C55 was introduced into the Planning Scheme.
14. Preparation of the amendment was delayed at the time by resourcing issues and by some difficulties in relation to LSIO schedule drafting, particularly in relation to the identification of flood freeboard height at which a planning permit is not required. The

CMA and Melbourne Water have different requirements. These issues have fed through to the current Amendment C81 provisions and will be discussed further in Council's Part B Submission.

15. The delays in acting on the 2011 Council resolution meant that the State Government's Victorian Coastal Inundation Dataset (VCID) was released before Council sought Authorisation to prepare the amendment. Following the release of the VCID, Council became aware that Bass Coast Shire Council proposed to use the VCID as a basis on which to map coastal inundation to the year 2100. This required South Gippsland Shire Council to reconsider our approach to our amendment. It is logical for adjoining councils to use similar controls, based on similar datasets, using similar planning justifications in situations where the external factors (weather events and climate change) affect both councils equally. Planning consistency between schemes will be discussed further in Council's Part B Submission.
16. During the delay period the CMA commissioned the 'Corner Inlet Dynamic Storm Tide Modelling Study' (Water Technology June 2014), which is identified as a reference document in the Amendment. This work was undertaken because the peer review study of the VCID identified potential issues with elements of the methodology used to map sea level rise and storm surge. The Water Technology modelling addressed the peer review concerns and demonstrates that the VCID is a reliable dataset for the application of the LSIO as proposed by this Amendment. These matters will be discussed further (by the CMA) as part of the Part B Submission. We note that the recently completed Western Port Local Coastal Hazard Assessment Report also (in Council's view) supports and substantiates the VCID.
17. Council reconsidered its position on the Amendment at its 25 September 2013 Ordinary Council Meeting at which it resolved to follow Bass Coast's lead and incorporate the VCID data into its mapping and apply the LSIO to coastal areas, including urban zoned land, based on the 2100 storm surge mapped extent. Importantly, this change occurred in combination with extensive changes to the proposed LSIO Schedule for the purpose of exempting new coastal township dwellings from requiring a planning permit if built above the specified inundation height. The exemption is a measure to find a balance between identifying risk and facilitating development while also having regard to the requirements of the SPPF and its directions in relation to consideration of climate change in urban areas.
18. Council's initial intention was to exhibit Amendment C81 in combination with Bass Coast's Amendment C82. Over time this became impractical as this Council did not have the resources to process the amendment on Bass Coast's timelines. It is noted that the Bass Coast amendment was part funded by Melbourne Water. As Amendment C81 does not directly affect Melbourne Water's South Gippsland catchment, we have not been able to secure funding for the processing of Amendment C81, except to the extent that the CMA have agreed to assist with part payment of the Panel fees. This point is noted only to demonstrate that Amendment C81 is a major undertaking for Council and likely to be the only opportunity for some time to come to consider these issues.

19. Eventually the two amendments were out of step to a point that it was logical for this Council to wait for Bass Coast to take its Amendment to Panel before Amendment C81 was exhibited. This allowed us to learn from their process and gain an understanding of how a Panel might view an amendment involving the VCID. Council exhibited Amendment C81 shortly after Bass Coast adopted its Amendment.
20. At the conclusion of exhibition, Council considered the submissions at its Ordinary Council Meeting on 25 November 2015 at which time it was resolved to refer all submissions to a Panel and recommend minor changes to the Amendment provisions in response to some of the issues raised in submissions. The changes are discussed below.
21. Evidently the Bass Coast C82 Panel Report is going to form a cornerstone on which arguments around Amendment C81 will form, and some of these issues will be considered in more detail in the Part B Submission. It is also noted that the above summary demonstrates the time it has taken Council to reach this point. Council waited a number of years to get updated flood mapping to replace the poorly mapped ESO6 and it has taken many years to gain a basic understanding of the impacts of rising sea levels on coastlines. The planning system is 'prone to waiting' as there is always an impending study, policy review, discussion paper, or change of government that can be presented as a reason to delay implementing an amendment that might involve complex issues. Where climate change related impacts are involved, the temptation to keep waiting is multiplied because the policy environment and scientific understanding is continuing to evolve – and this is unlikely to stop in the near future. It is the view of Council that further waiting is not warranted and that we now have sufficient justification to apply the LSIO, as exhibited, to identify a known risk and that this action is in accordance with the SPPF for the reasons set out below.
22. Exhibition of Amendment C81
23. Extensive exhibition of the amendment occurred. Exhibition occurred for six weeks and concluded on 15 October 2015. Exhibition notice was provided by:
 - Postal notification to the owners and occupiers of all land where the LSIO is proposed to be applied, where existing LSIO mapping is being amended and where the Environmental Significance Overlay Schedule 6 (ESO6- Areas susceptible to flooding) is to be replaced by the LSIO. Postal notification was not provided to owners / occupiers of land affected by the existing LSIO in Melbourne Water's catchment area west of Korumburra. The LSIO mapping in this area is not changed by Amendment C81 and the proposed new Schedule benefits these landowners by its introduction of more planning permit exemptions. The Amendment is a net benefit to these landowners.
 - Public notice, press release and newspaper articles in the three local newspapers, as well as the Yarram Standard.

- Public notices, display information, and Amendment technical documentation provided at 15 locations across the area affected by the Amendment.
 - Extensive Amendment information on Council's webpage and the Planning Ministry's webpage.
 - Community information drop-in sessions at Port Welshpool, Sandy Point, Tarwin Lower and Leongatha.
24. In general the community response to Amendment C81 was positive with most landowners understanding from the exhibition information how the provisions might affect their land. A key benefit of the Amendment is that the removal of the ESO6, and its replacement with a more accurately mapped LSIO, removes 660 lots from any form of flood / inundation control. Feedback from these landowners has been very positive however this feedback is not represented in the submissions received. Residents tend not to write to Council when they are happy!
25. Also evident from the exhibition process was a very clear expectation from the community that it is important that Council accurately identify inundation prone land in the Planning Scheme. In coastal areas it was also evident that landowners are informed of the potential impacts of rising sea levels and very few questions were made of the science underpinning sea level rise. This is reflected in the submissions (11 objections from residents of coastal townships) which acknowledge climate change but focus their concerns on how the Amendment provisions seek to address climate change challenges. Only two submissions clearly state that they believe that sea levels are not rising - citing a historic high tide marker at Port Arthur in Tasmania as evidence.
26. Amendment C81 has undergone extensive community consultation which exceeded the statutory requirements of the Act. Approximately 150 general enquiries were received. Council officers are satisfied that parties likely to be affected by the Amendment have been given every fair opportunity to inform themselves of the Amendment and its potential impacts.

27. STRATEGIC ASSESSMENT

28. The following is an assessment of the Amendment against the Objective of Planning in Victorian and the most relevant State and Local planning policies. Also included is a brief discussion of other relevant documents that contribute to our understanding of this issue, such as the Victorian Coastal Strategy and the Draft Victorian Floodplain Management Strategy 2015. As noted above, climate change and climate change response is an evolving area and it is beneficial to have an overview of some of the policy work occurring and some of the recommendations coming out of these works.
29. Objectives of Planning in Victoria
30. The objectives of planning in Victoria are:

- (a) to provide for the fair, orderly, economic and sustainable use, and development of land;
 - (b) to provide for the protection of natural and man-made resources and the maintenance of ecological processes and genetic diversity;
 - (c) to secure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria;
 - (d) to conserve and enhance those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value;
 - (e) to protect public utilities and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community;
 - (f) to facilitate development in accordance with the objectives set out in paragraphs (a), (b), (c), (d) and (e);
 - (g) to balance the present and future interests of all Victorians.
31. The amendment will provide for the economic and sustainable use and development of land by ensuring that planning decisions for new developments are based on all available knowledge of riverine flood extents and coastal inundation extents.
32. The application of the Land Subject to Inundation Overlay will also provide for the protection of natural and man-made resources and the maintenance of ecological processes by ensuring that development does not affect the passage or temporary storage of flood waters.
33. It will also help to secure a safe working, living and recreational environment for all Victorians and visitors to Victoria by ensuring that development and housing is constructed in a manner that avoids the adverse impacts of flooding and the risks this bring.
34. The Amendment also “Balances the present and future interests of all Victorians”. Application of the LSIO identifies an ongoing long term risk and one that might be exacerbated in the future. There is little doubt that application of an LSIO to land (especially urban zoned land) affects current landowners in a way that most would not welcome. However this must be balanced against future interests, at both local and State level.
35. In the planning system, responding to climate change impacts provides one of the clearest focus points on the Objective to “Balance the present and future interests of all Victorians”. The future interests of all Victorians are, in the view of Council, to identify the full extent of expected risk now and not to rely on future engineering solutions to manage the risk. This Objective in our view supports Council’s intention to apply the LSIO, including on urban areas at 0.8m at the year 2100.
36. State Planning Policy Framework
37. Clause 11.05-4 ‘Regional Planning Strategies and principles’ has the Objective “To develop regions and settlements which have a strong identify, are prosperous and are

environmentally sustainable”. Under the section ‘Climate change, natural hazards and community safety’ it states that planning must “Respond to the impacts of climate change and natural hazards and promote community safety by:

- “Siting and designing new dwellings, subdivisions and other development to minimise risk to life, property, the natural environment and community infrastructure from natural hazards, such as bushfire and flood.
 - Developing adaptation response strategies for existing settlements in hazardous and high risk areas to accommodate change over time”.
38. The LSIO mapping identifies area at risk of inundation (inland and coastal) and its application will discourage the siting of buildings and works and subdivisions in areas at risk. Where it is practical on a lot, new buildings should be located in areas not prone to inundation (outside of the LSIO) however where it cannot be avoided (such as most urban zoned land in coastal townships) buildings should be constructed in a manner that reduces their flood risk – in most cases this will involve increasing floor levels. This will assist in protecting life, property and community infrastructure as detailed in the first dot point.
39. ‘Developing an adaptation response’ is not clearly defined (what it would entail) in the policy. We argue that application of the LSIO to known risk areas, including areas at risk of future inundation resulting from coastal climate change impacts, is the first step in preparing an adaptation response. Our response is a tool for mapping areas at risk and guiding new development to a floor height that reduces exposure to future impacts. Clearly further adaptation planning work is required, but the first step must be to identify the risk and introduce common sense initial responses best suited to the level of risk information available.
40. Clause 13.01-1 ‘Coastal inundation and erosion’ provides the Objective “To plan for and manage the potential coastal impact of climate change” and lists the relevant Strategies which are:
- In planning for possible sea level rise, an increase of 0.2 metres over current 1 in 100 year flood levels by 2040 may be used for new development in close proximity to existing development (urban infill).
 - Plan for possible sea level rise of 0.8 metres by 2100, and allow for the combined effects of tides, storm surges, coastal processes and local conditions such as topography and geology when assessing risks and coastal impacts associated with climate change.
 - Consider the risk associated with climate change in planning and management decision-making processes.
 - For new greenfield development outside of town boundaries, plan for not less than 0.8 metres sea level risk by 2100.

- Ensure that land subject to coastal hazards are identified and appropriately managed to ensure that future development is not at risk.
 - Ensure that development or protective works seeking to respond to coastal hazard risks avoid detrimental impacts on coastal processes.
 - Avoid development in identified coastal hazard areas susceptible to inundation (both river and coastal), erosion, landslip / landslide, acid sulfate soils, bushfire and geotechnical risk.
41. Amendment C81 is consistent with the provisions of Clause 13.01-1 however a question does arise over the interpretation of the first dot point which is considered in more detail below with regard the Bass Coast Amendment C82.
42. Council believes that how these provisions may be interpreted is open to interpretation and furthermore, some of the requirements appear to crossover each other in terms of what they seek to achieve. For example, you could argue that (dot point three) an appropriate consideration of "...the risk associated with climate change in planning and management decision-making processes" can be used to justify application of the LSIO at 0.8 metres in urban areas if you have the information (as we argue we do in relation Amendment C81) to substantiate the risk, and hence it is good "planning and decision-making process" to apply the LSIO to all areas of known risk. Dot point 5 further assists this argument where it directs that hazard areas be identified, which Council considers can only be achieved via overlay application. How overlays may be applied, especially in urban areas, might also be open to consideration with the wording of dot point one which states "may be used" which appears to provide some level of decision-making discretion. Planning Practice Note 53 'Managing coastal hazards and the coastal impacts of climate change' provides no commentary on how these provisions may be interpreted in relation to new overlay application.
43. Because of the challenges the policy provisions present in term of the individual requirement of 13.01-1, the following general comments are made.
44. Council currently has no planning scheme overlay to identify coastal hazard risks resulting from rising sea levels. This means that planning permit applications do not presently consider the impacts of rising sea levels. The absence of an overlay also means that land is being purchased without identification of the risk. Council now has hazard mapping data of sufficient accuracy to map the risk via application of the LSIO. Application of the LSIO addresses the policy requirements because it:
- Identifies the risks associated with climate change by placing the LSIO on coastal areas, triggering planning permits, which allows the appropriate 'management decisions-making processes' to occur.
 - Applies the LSIO to addresses the requirement that "...future development is not at risk" by identifying risk areas, triggering planning permits in some circumstances and discouraging development that may present an unacceptable risk in the future.

- Applies the LSIO on the basis of 0.8 metres sea level rise with consideration of storm surge and other factors based on the best available information presently available, which is consistent with application of the precautionary principle.

45. Bass Coast Amendment C82 and the SPPF

46. Interpretation of Clause 13.01-1 was extensively debated in the consideration of Bass Coast's Amendment C82. Bass Coast Council submitted to the Panel that the explanatory information accompanying Amendment VC94, in combination with the wording of Practice Note 53, allows the policy provisions to be interpreted such that 0.8m to 2100 can be applied to all areas as a strategic planning response (e.g. application of the LSIO) while the requirement in relation to 0.2m to 2040 is a statutory response to be considered when planning permit applications are assessed, and does not limit the ability of council to apply the LSIO based on the 0.8m 2100 scenario. This is a brief summary of their detailed argument.
47. In support of the Bass Coast position, the SPPF provisions (as noted above) are somewhat problematic. Having two dot point references to requirements in relation to planning for 0.8m is confusing and not assisted by the supporting explanatory information which is open to interpretation. The Bass Coast argument was not supported by the C82 Panel for the reasons set out in some detail in the Panel Report. There is no benefit in revisiting these arguments in this submission. We accept the interpretation that for the purpose of applying the LSIO based on the VCID, the policy, if applied to new LSIO mapping, encourages mapping in urban areas on the basis of 0.2m at 2040. However we only accept this position where additional justification is absent.
48. Regarding LSIO application based on 2040 and 2100 scenarios, the C82 Panel Report states (pages 19 & 20):

“The Panel believes that the meaning of clause 13.01-1 is clear as described in the explanatory report for VC94, which states, under the heading ‘How does the amendment address the environmental effects and any social effects?’

Amendment VC94 provides flexibility and certainty on planning for coastal climate change by introducing a short term benchmark to be used for new development within existing urban areas (infill development) while further information becomes available and this strategic adaptation planning work can be undertaken by Council's departments and agencies. The existing requirements to plan for not less than 0.8 metre sea level rise by 2100 will continue to apply for greenfield developments outside of existing town boundaries (Panel emphasis)”

The Reasons for Decision to use the Ministerial Powers of Intervention for Amendment VC94 provides some further similar guidance by stating:

The clause (13.01) ensures that decision making considers the risk associated with climate change with a long term probable sea level rise benchmark of not less than 0.8 metres by 2100. Amendment VC94 will provide flexibility and certainty on

planning for coastal climate change for urban infill development while further information becomes available and this strategic adaptation planning work can be undertaken...

49. The C82 Panel Report concludes its commentary on this matter by stating:

“The Panel’s interpretation of these explanatory words is that strategic planning for urban infill areas should apply a 0.2m sea level rise by 2040 ‘*while further information becomes available and this strategic adaptation planning work can be undertaken by Council’s, departments and agencies*’. In other words, where predicted coastal inundation has not been subject to more detailed dynamic modelling, 0.2m by 2040 should apply to urban infill areas. (Council emphasis)

50. Where Amendment C81 differs from C82 is that the VCID data in Corner Inlet has been verified and improved by the Corner Inlet Dynamic Storm Tide Modelling Assessment June 2014, providing a more detailed assessment of climate change related impacts than the bathtub model on which the VCID data is based. The Assessment considers a range of input factors including geomorphology, local wind and tide conditions, wave setup and dynamic inundation modelling. The technical values of the Assessment will be discussed in more detail in the CMA’s submission (Part B) however we believe that this Assessment is the “*...more detailed dynamic modelling...*” referred to above.

51. There is no planning policy or document that provides clear direction on how overlays should be applied to coastal areas to manage coastal climate change impacts – additional policy direction from the State would be beneficial. The Clause 13.01-1 policy provisions are open to interpretation and Council accepts the conclusions drawn in the C82 Panel Report, however where further information has been provided which builds on and verifies to a large extent the accuracy and appropriateness of using the VCID to apply the LSIO, we argue that the LSIO can be applied to urban areas at its fullest 2100 extent.

52. While some of the Clause 13.01-1 policy statements are open to interpretation, one statement is clear “Ensure that land subject to coastal hazards are identified and appropriately managed to ensure that future development is not at risk.” (emphasis added). This is considered by Council the most definitive statement in the State policy. It does not say *plan for, consider, avoid or may be used*, it says we have to ensure we identify hazards and ensure future development is not at risk. This is the precautionary principle clearly stated. Practice Note 53 under the heading ‘Strategic planning for coastal areas and rezoning for urban purposes’ references the precautionary principle in its summary of the decision-making process where it addresses the ‘precautionary approach’ when evaluating risk and in preparing response strategies. Climate change is one of the most significant ongoing risks we face and is the area of land use planning where the precautionary principle must sit near the top of the decision-making tree. Amendment C81 is not a comprehensive planning response to the management of coastal climate change issues, but the LSIO mapping is based on the best available and verified information and its application to land (regardless of zoning) is considered to be consistent with the precautionary principle and the policy.

53. Clause 13.02-1 Floodplain Management

54. Relevant to inland application of the LSIO, Clause 13.02-1 has the objectives To assist the protection of:

- Life, property and community infrastructure from flood hazard.
- The natural flood carrying capacity of rivers, streams and floodways.
- The flood storage function of floodplains and waterways.
- Floodplain areas of environmental significance or of importance to river health.

55. Most relevant Strategies are to:

- Identify land affected by flooding, including floodway areas, as verified by the relevant floodplain management authority, in planning scheme maps, Land affected by flooding is land inundated by the 1 in 100 year flood event or as determined by the floodplain management authority.
- Avoid intensifying the impacts of flooding through inappropriately located uses and developments.

56. It is clear from the submissions that inland application of the LSIO is not a controversial element of the amendment. The amendment benefits more inland residents than it burdens because of the removal of the outdated ESO6.

57. The riverine LSIO mapping was prepared by the CMA and they can inform the Panel of the methodology used in their element of the Part B submission at the Panel Hearing. Suffice to say at this time that the methodology used was the same as that used in support of Bass Coast Amendment C82 and as used by other CMA's across the State.

58. The C82 Panel was satisfied that the methodology for LSIO application was sound and consistent with the requirements of Clause 13.02-1.

59. Clause 14.02-2 Water quality

60. The Objective is 'To protect water quality'. The relevant strategy in relation to Amendment C81 is:

- "Discourage incompatible land use activities in areas subject to flooding, severe soil degradation, groundwater salinity or geotechnical hazards where the land cannot be sustainably managed to ensure minimum impact on downstream water quality or flow volumes."

61. Allowing development in areas prone to flooding increases the risk of water contamination. Flood waters inundate wastewater treatment systems and can lead to chemical contamination, especially in farming areas. LSIO application identifies the areas of risk and discourages the establishment of inappropriate developments in these areas.

62. Local Policy Clause 21.03-3 Environmental risk

63. The relevant 'Key issues' policy statements are:

- “The anticipated impact of climate change on the local environment, and the need to monitor and continue to plan for these impacts in the context of broader climate change policy and new knowledge.
- Pressure for development and subdivision along the coast and other environmentally sensitive areas, and the associated impacts of vegetation clearing, introduction of pest and animals, erosion and a decline in water quality.”

64. The Amendment is consistent with these provisions. Application of the LSIO to coastal areas is a first step in planning for the impacts of climate change and is done so in acknowledgement of the broader climate change policy debate and the inevitability of new information being presented required changes in the future.

65. Local Policy Clause 21.07-1 Climate change

66. The policy Overview statement says:

“The effects of climate change on the local environment are also starting to appear and will continue into the future, including a hotter, drier climate with fewer rainy days but an increased intensity of rainfall events. The potential flow-on effects from these changing climatic conditions include reduced agricultural production, decreased and more erratic environmental flows in waterways and wetlands, increased risk of bushfire, and decreased water security for settlements and activities. Direct impacts of climate change are also likely to include an increase in storm surges, increased and altered patterns of erosion of beach and dune systems, undercutting of cliffs, increased peak flows in coastal rivers and estuaries and damage to coastal infrastructure (piers, jetties, breakwaters and seawalls).”

67. The Objective is “To manage the impacts resulting from climate change”. The one current strategy is unrelated to the Amendment.

68. 'Implementation' says 'Strategies relating to climate change will be implemented by – Applying the Land Subject to Inundation Overlay.

69. Further actions are to:

- Monitoring and continuing to plan for the impacts of climate change on the local environment in the context of broader climate change policy and new knowledge.
- Updating the Land Subject to Inundation Overlay so that development in coastal areas is compatible with the risk of climate change sea level rise and storm surge inundation.

70. Amendment C81 is consistent with these provisions. The LSIO is being used to map the hazard areas and the policy notes the evolving policy environment and the need to update the planning response as new information becomes available.

71. Local Policy Clause 21.15-9 Venus Bay – ‘Further strategic work’

72. Further strategic work for the township includes:

- Investigate a flood study for Venus Bay to inform a local policy or overlay control within the planning scheme. The study should include a reference to climate change impacts.
- Review the suitability of planning controls to land potentially affected by flooding, acid sulphate soils and sites of known cultural heritage significance. Amend or develop new controls as appropriate

73. The amendment is consistent with these ‘Further strategic work’ requirements. A flood study for Venus Bay in particular has not occurred. Retention or rewording of this provision requires discussion with the CMA.

74. Local Policy Clause 21.15-12 Tarwin Lower – ‘Further strategic work’

75. Further strategic work for the township includes:

- Review the suitability of Environmental Significance Overlay, Schedule 6, and develop amended or new controls as appropriate, to address land potentially affected by flooding

76. The amendment fulfils this requirement, supporting its removal from the planning scheme.

77. Flood inundation areas are currently displayed in the Port Welshpool and Port Franklin Framework Plan maps. To achieve consistency with other Framework Plan maps, the ‘Land potentially subject to flooding’ will be removed from these maps.

78. Other Policy Directions

79. The following is a brief overview of other State provisions considered relevant to the Amendment. While not specifically required as part of the Strategic Assessment process, some of the following comments justify why some actions have been taken.

80. Ministerial Direction No. 13 Managing Coastal Hazards and the Coastal Impacts of Climate Change

81. The Ministerial Direction is specific to the rezoning of land abutting the coastline and land below 5 metres AHD. Specifically the Direction provides no comment on the application of overlays seeking to identify areas at risk of coastal impacts of climate change. While not strictly relevant, the ‘Requirements to be met’ set out the same range of issues and impacts Council considers relevant in its justification for application of the LSIO on coastal areas, including urban areas. The act of having a comprehensively

applied coastal LSIO in place should form a further discouragement to any future proposal to rezone land vulnerable to coastal impacts of climate change.

82. Victorian Coastal Strategy 2014

83. The State's leading coastal planning document, the Victorian Coastal Strategy (VCS) sets out the requirement to plan for 0.2 metres over 1 in 100 year flood levels by 2014 in urban infill areas and requirements in relation to 0.8 metre planning. Amendment C81 is consistent with the principles of the VCS. Interestingly, the wordings of the SPPF strategies at 13.01-1 are sourced directly from the VCS 'Policy for decision-making' section at page 52. The only strategy not sourced from the VCS is the Strategy "Ensure that land subject to coastal hazards are identified and appropriately managed to ensure that future development is not at risk".

84. The Victorian Coastal Hazard Guide 2012 is a guide and not policy. However it does provide important guidance in the preparation of coastal hazard assessments, which is a discretionary requirement of the proposed LSIO schedule.

85. Practice Note 12 Applying the Flood Provisions in Planning Schemes

86. The Practice Note provides guidance on what overlay or zone should be applied to identify and manage flood risk. The dataset originally provided to Council by the CMA proposed application of both the LSIO and FO in riverine areas. Mapping of the FO was challenging (small areas, irregular shapes, affecting non-urban land) and it was evident that little practical benefit was gained from applying the FO in combination with the LSIO. The decision was made to only apply the LSIO. Application of the LSIO is considered to be consistent with the requirements of the Practice Note.

87. The C82 Panel accepted the use of the LSIO as the sole overlay tool to map inundation areas. The C82 Panel also formed the view that, in the absence of any more appropriate control, application of the LSIO is appropriate to map coastal inundation. These matters are addressed in detail in the C82 Panel Report and no further justifying comments are considered necessary in this submission.

88. Victorian Floodplain Management Strategy 2015 DELWP (draft)

89. The Victorian Floodplain Management Strategy 2015 (VFMS) has undergone community consultation and Council understands that a revised version is currently with the Minister for consideration. The document carries no 'decision making weight' at this moment and it includes all the above references to the SPPF, the VCS and the Victorian Climate Change Adaption Plan etc. regarding planning for 0.2 and 0.8 metre sea level rise. Why this document is of interest to Amendment C81 is because of the comments at Chapter 15.4 'Planning for rising sea levels' (page 43) where it states:

"As outlined in section 13, the CMAs and Melbourne Water will work in active partnership with the LGAs to develop regional priorities for riverine and estuarine floodplain management. For coastal flooding, however, the CMAs and Melbourne Water will have a supporting role: LGAs wishing to prepare

adaptation plans, conduct flood studies or amend Planning Schemes in response to the risk of coastal flooding can seek assistance from DELWP and the CMAs or Melbourne Water.” (emphasis added)

90. While only a draft document, this statement shows intent on the part of the State Government to make climate change land use management the responsibility of local government for the purpose of initiating further investigation and implementation work. This is interesting because if these words do capture the State’s views then it is up to councils to “Ensure that land subject to coastal hazards are identified and appropriately managed to ensure that future development is not at risk” as required in the SPPF policy.
91. At present, no other agency appears to be leading the response to planning for coastal climate change impacts. If the State places this responsibility with local government, then local government should be appropriately empowered to determine what it considers is required to ensure hazards are identified and risks are managed.
92. As noted above, it is difficult to make changes to the planning system. Sea levels are rising and the risks should be identified now. It is the view of this Submission that the VCID mapping, verified and improved by the Corner Inlet Assessment provides a sound, policy supported, basis on which to apply the full extent of the LSIO at 0.8 metres at 2100 (with storm surge) based on the precautionary principle and the fact that if we don’t do it now, it might not be done any time soon. We also believe that there are grounds within the SPPF, as discussed above, to support this position.
93. **SUBMISSIONS TO AMENDMENT C81**
94. A total of 24 submissions were received to Amendment C81 of which 15 are from private landowner with the remaining being from agencies and authorities. A copy of all the submissions has been previously provided to the Panel. A number of common themes run through the landowner submissions. They are addressed below by issue to save on repetition. Following this is a summary of issues that are specific to submissions. The CMA will address mapping changes made to address submitter concerns. Council agrees with the mapping changes recommended by the CMA.
95. SUBMISSION - "Application of the LSIO mapping is overly simplistic or speculative"
96. A common theme in the submissions is that the coastal mapping of the LSIO is overly simplistic because it fails to consider a broad range of factors that might affect rising sea levels and / or that the mapping is speculative because insufficient certainty surrounds predicted rising sea levels to accurately map likely affected areas.
97. In response to these submissions, how coastal areas might be affected in the future by rising sea levels is difficult to accurately determine. The modelling on which the LSIO mapping is based does not consider all of the technical factors that might allow highly accurate identification of land susceptible to inundation at any point in time up to the year 2100. For example, the modelling does consider increased storm activity however does not consider changes to coastal geology and the potential that sand dunes and

barrier islands currently protecting urban areas might disappear as a result of increased storm activity, leaving settlements more exposed to coastal storm activity.

98. The complexities and uncertainties surrounding the impacts of rising sea levels on coastal townships is such that it is not practical to acquire all of the required information before any action is taken. In this regard the LSIO mapping can to an extent be considered simplistic and to a degree speculative, however it is the best information currently available to identify a coastal hazard which is real and necessary to consider when land is proposed for development.
99. Amendment C81 is a step in what is likely to become in future years a far more detailed response to managing and planning for climate change impacts along the coastline. When new information becomes available the mapping may be updated, and when new government policies and actions are developed, they can also be considered in the context of our coastal township planning.
100. Use of the VCID to map coastal inundation was examined in detail at the C82 Panel Hearing and commented on in the C82 Panel Report. Expert evidence regarding the suitability of the VCID to apply with LSIO was presented. After considering all the evidence the C82 Panel Report concluded that:

“...although there are some issues with the accuracy of datasets used, the mapping of the LSIO has been prepared using the best available data at the time. This means that it will not always be considered the most accurate and that the ‘experts’ may not agree on all the data used and how it has been used in preparing the mapping for the LSIO as part of Amendment C82.

The Panel, however, concludes that in the absence of any more relevant and localised modelling and data, the Council has used the best available to it, in fact, the Proponents have used VCID, which is the dataset the State policy specifies ought to be used in planning for climate change at *‘a regional scale to assist strategic planning and risk management and it can be used to inform...strategic land use planning’* (Panel emphasis)

101. It was also noted by the C82 Panel that application of the LSIO is for the purpose of triggering planning permit applications in the circumstances set out in the LSIO schedule. The LSIO does not prohibit anything; it only triggers the need for closer consideration or risk. If application of the LSIO acted like a zone, having the effect that its spatial application brought with it very specific requirements on how land can be used and developed, then in such circumstances the requirement should be on Council to provide a very high level of justification to support mapping application. However this is not the case and broad discretionary powers remain for Council and the CMA to exercise – powers that are subject to review by VCAT if required.
102. SUBMISSION - "Impact on land values, land sales and insurance"

103. A concern expressed in most submissions is the fear that application of the LSIO will detrimentally affect land values, make it more difficult to sell land and increase insurance premiums.
104. It is a common fear that the application of a new planning scheme overlay will affect land values. This matter has been researched in relation to many overlays in Victoria and little evidence can be found to support the assumption. This is because in the majority of cases the risks identified by an overlay (e.g. fire, flood, landslip) are evident to most informed land buyers regardless of the presence of an overlay. Exhibition of the Amendment has revealed a high degree of knowledge and understanding of the risk posed by rising sea levels.
105. Regarding land values and the potential to sell land, it is important to reiterate that the LSIO does not prohibit development and is 'development proactive' in that the LSIO provisions in coastal townships specifically exempt the requirement for a planning permit for a new dwelling if the floor levels are raised above inundation height. This is a positive statement that every residential zoned lot in the proposed LSIO can have a dwelling. The certainty that you can build a dwelling in a coastal township (along with the other permit exemptions offered in the LSIO schedule) should further address concerns that application of the LSIO may affect land values or make it difficult to sell land. If land values are unaffected, it is reasonable to assume that the LSIO will not result in Council reducing its property rating of land. Reduced Council rating was queried in many submissions.
106. Concerns about insurance premiums are common when flood / inundation controls are applied. The key point to note is that insurance companies already have and consider the flood data Council has used to map the LSIO when they make their insurance assessments. Furthermore, insurance companies do not offer a product that covers property damage resulting from sea water storm surge or incremental sea level rise.
107. While the abovementioned matters are primarily private sector / market force issues, and Council is not required to consider market forces in its administration of the Planning Scheme, experience in other councils has found that application of the LSIO, or similar inundation / flooding controls, does not have any significant or lasting effect on land values, land sales or insurance premiums.
108. SUBMISSION - "What is to be done to protect land from inundation?"
109. In various forms, five submissions discuss the need for Council to consider measures to protect coastal townships from inundation and / or protect infrastructure in the townships. As one submission notes, there is no point in raising the height of dwellings if the infrastructure in town is flood damaged beyond repair.
110. There are no Council or State Government plans or policies to implement physical measures to mitigate against rising sea levels in the Shire though some other land managers have undertaken such works. Some large urban centres around Australia have commenced building works to control coastal erosion resulting from increasing

storm activity however these are localised works and not part of any coordinated state or national strategy. In coastal areas, Amendment C81 seeks only to identify land that may be susceptible to coastal inundation and is not a tool through which Council can or should consider how mitigation works may be undertaken.

111. In reference to Panel Direction 10e which requires this submission to provide “An overview of infrastructure measures proposed by Council to address coastal erosion (as raised by some submitters), Council currently has no measures in place or proposed to undertake any works to address coastal erosion.

112. SUBMISSION - "Gradual implementation of controls"

113. Two submissions discuss the fact that buildings constructed today are likely to be redeveloped in 30-40 years' time and on this basis it is not appropriate to require buildings to be constructed at a worst case scenario height at the year 2100. The argument continues that buildings constructed tomorrow should be allowed at lower heights because they will be nearing the end of their structural life by the time they might become vulnerable to rising sea levels.

114. This argument has some practical merit however it is difficult to capture how this outcome could work within the provisions of the LSIO planning control. It is not practical to issue planning permits requiring buildings to be removed after a set number of years and in the absence of scientific certainty regarding the rate at which sea levels might rise, it would present a risk to assume that the next 30-40 years is a safe period and it is only the replacement structures that should consider rising sea levels.

115. While achieving the requested outcome in the LSIO provisions is highly problematic, the LSIO provisions do allow Council to consider buildings at any height in the overlay. This means that Council and WGCMA retain discretion to approve low floor height buildings if they are satisfied that buildings have a reduced risk. For example a relocatable dwelling or dependent persons unit does not present the same risk as a waterfront hotel. Planning permit applications can continue to be assessed on their merits.

116. SUBMISSION - "LSIO should only be applied to vacant land"

117. The LSIO has no retrospective powers on existing buildings and works and it is only new buildings and works that must consider its requirements. In response to this, submitters recommend that the overlay only be applied to vacant land. This recommendation is not supported. It is normal practice to apply risk related planning scheme overlay controls on land regardless of its existing use or development pattern. Applying the LSIO to developed lots allows Council to consider how these sites are redeveloped in the future, which is a reason for the Amendment.

118. Other matters raised in landowner submissions

119. *"Will Council provide compensation to landowners?"*

Compensation is not provided to landowners for any actual or perceived loss of land value or development potential resulting from the application of overlay controls.

120. *"Council legal liability resulting from LSIO application"*

Application of the LSIO to recognise land potentially susceptible to inundation does not create a liability risk for Council and it does not absolve Council from future legal action.

121. *"The LSIO is an inappropriate planning tool and contrary to proper planning"*

The LSIO has been used by other councils to identify both inland and coastal inundation. Applying the LSIO as proposed by Amendment C81 is considered orderly planning. As noted above, application of the LSIO in similar circumstances was supported by the Bass Coast Amendment C82 Panel Report.

The introduction of a new form of overlay to address climate change related sea level rise has been discussed in Victorian planning for a number of years. Until such time as a new overlay tool is introduced, the LSIO is the most appropriate overlay to consider rising sea levels.

122. *"Inland mapping of the LSIO should be reviewed"*

Three submissions from inland property owners query the remapping of the existing LSIO boundaries. The WGCMA has visited these sites and present their recommendations in their element of this submission.

123. *"Disability access"*

Two submissions comment that raising the floor height of dwellings will create difficulties for disability access. Disability access is controlled through the building approvals process which stipulates the minimum standards that must be achieved. Ramps may be required to access some new dwellings however for residential buildings, there is no mandatory requirement that new dwellings provide disability access.

124. *"Requirement for a licensed surveyor in Application requirements"*

Discussed in submission one, it is commented that this requirement will add to development costs and is not necessary where detailed contour plans in coastal areas are already available.

Council's response is that the header provision allows this requirement to be set aside by the CMA. If the application is of a minor nature the requirement for a surveyor to shoot a level may be excessive, however for a new dwelling it may be relevant. The Schedule as drafted provides decision-making discretion and is recommended for retention as drafted.

125. *"Requirement for a Coastal Hazard Vulnerability Assessment"*

Similar to the above discussion regarding the requirement for a licensed surveyor, the Schedule provisions requiring a Coastal Hazard Vulnerability Assessment (CHVA) provide discretion in how they will be applied. They are onerous requirements but Council and the CMA might choose to require a CHVA for a single dwelling if the proposed dwelling is in our view particularly vulnerable. It is Council's preference to retain these provisions as they are currently drafted.

126. Submission 11 – 5191 Strzelecki Highway Leongatha

The subject land is affected by the ESO6 which is proposed to be replaced by the LSIO. The LSIO is mapped to only those areas of the land susceptible to flooding from Coalition Creek. The submission requests that the extent of overlay application not be reduced. The submission makes reference to the FZ being 'Flood Zone' when it is actually the Farming Zone. Council has sought to clarify this point with the submitter.

The submitters primary concern is that new development upstream of their land (including industrial developments) are exacerbating flooding and contamination of their land. While legitimate concerns, they are more matters associated with stormwater drainage management than overlay application. Removing the ESO6 and applying the LSIO will not change the issues of concern.

The submission comments that impacts on their land will worsen if land adjoining the golf course (east of the railway line) is developed. The land is identified in the Leongatha Structure Plan as a potential industrial area. The proposed industrial area is not affected by the ESO6 and not proposed for inclusion in the LSIO. Declared waterways cross this land which eventually cross the submitter's land however the overlay changes proposed by Amendment C81 are neutral in terms of any relationship between the development of the land

127. Submissions 8 & 9 Seawalls at Sandy Point

Submissions 8 and 9 imply that the seawalls around Sandy Point may involve some current level of Council management or involvement. This matter has been researched and the following information provided to clarify the current situation.

The seawall network at Sandy Point (around Shallow Inlet) was constructed by three farmers between 1930 and 1950. In 1961 Council (former Shire of South Gippsland) investigated the walls and limited maintenance works were coordinated by Council between 1961 and 1972. No evidence is available as to how these works were funded.

Since 1972 Council has undertaken no works on the walls. Council is not involved in any committee of management or involved in any way with administration or maintenance of the walls. Council's Engineers have advised that anecdotal evidence suggests the condition of the seawalls and drains is very poor. Council has no intention to take any responsibility for the seawall.

128. Agency / authority submissions

129. *VicTrack request for permit exemption*

A small section of existing LSIO (west of Korumburra) affects VicTrack's rail corridor. VicTrack have requested the addition of a railway specific planning permit exemption into the LSIO Schedule. With the recent closure of the Tourist Railway, now trains currently run on the line and the State Government has no commitment to return rail services. The requested provisions are considered excessive for the limited likelihood they will ever be used. The change is not supported by Council, however if the provision were to be included, it would be neutral in effect.

130. *Gippsland Ports request for permit exemptions*

The proposed LSIO Schedule provides a series of exemptions for port related buildings and works – mostly minor in nature. Gippsland Ports has requested the permit exemptions be extended to include almost all buildings and works related to port activity including dredging and the construction of sea walls. The requested exemption is considered excessive. Port works have the potential to change how inundation water moves and should be considered by the CMA.

131. *South Gippsland Water request to remove LSIO from Public Use Zone*

The majority of South Gippsland Water's (SGW) assets are zoned Public Use Zone (PUZ). As exhibited, the LSIO is proposed to be applied to PUZ land. SGW note that application of the LSIO on PUZ land is contrary to the purpose of the zone which is to limit the burden of planning schemes on utility providers. It is noted that different planning schemes approach overlay application on PUZ land in different ways. It is recommended that no change be made to Amendment C81 and that SGW's concerns be presented to the Panel for consideration along with their further request for additional exemptions where new assets are proposed outside of PUZ land.

132. Submissions of support or acknowledgement were received from Wellington Shire Council, Bass Coast Shire Council, DELWP, Southern Rural Water, EPA and Melbourne Water.

133. We note that Parks Victoria was specifically informed of the proposed application of the LSIO over Tidal River (Wilson's Promontory), including the township area. Council received queries from Parks Victoria over the nature of the controls however Parks Victoria have made no submission. It is concluded from this that Park Victoria do not object to the application of the LSIO.

134. CHANGES TO THE AMENDMENT DOCUMENTATION

135. The CMA has held discussions with a number of the submitters regarding the proposed application extent of the LSIO. The mapping changes are detailed in the CMA's submission which is separately circulated as a component of the Part A Submission. We note that the CMA submission circulated on 16 February is a Draft submission and some changes to the submission might be presented at the Panel Hearing, however these changes do not involve mapping changes.
136. Council has no objections to the proposed changes. The changes mostly reduce the extent of LSIO mapping application and do not include any new landowners and hence the changes do not present any procedural concerns regarding notice.
137. Minor changes are proposed to the LSIO Schedule. The changes were supported by Council at the November Ordinary Council Meeting. The main change is the introduction of a specific new dwelling permit trigger provision for Port Welshpool. The height trigger is reduced from 3.4 metres to 3.0 metres AHD for Port Welshpool's urban zoned land. The reduced height is supported by the Corner Inlet Assessment which found that storm surge conditions have marginally reduced sea level impacts in Corner Inlet – less so than indicated by the VCID.
138. An earthworks exemption has been included similar to the inclusion made to the Bass Coast C82 LSIO Schedule. The new provision will allow earthworks involving the receipt, importation, stockpiling or placement of more than 100 cubic metres of fill without requiring a planning permit. This provides a common sense level of flexibility regarding soil movements unlikely to affect stormwater flows.
139. The draft revised Schedule presented to the November Ordinary Council meeting included a drafting error. The permit exemption for earthworks should be amended to read "Earthworks involving the receipt, importation, stockpiling or placement of not more than 100 cubic metres of fill". The Council Report clearly explains what was to be achieved, so this change is consistent with the intent of Council's decision and is recommended to the Panel.

End of Part A Submission.