

26 June 2023

Tasmanian Planning Commission <u>tpc@planning.tas.gov.au</u> Tasmanian Planning Commission, GPO Box 1691, Hobart 7001.

Draft State Planning Policies Representation

From Derwent Estuary Program June 2023

To the Tasmanian Planning Commission,

Thank you for the opportunity to provide feedback on the draft Tasmanian Planning Policies. Please see attached the submission from the Derwent Estuary Program. The Derwent Estuary Program requests that matters of water quality and aquatic environment protection be more clearly identified and strengthened in the Tasmanian Planning Policies.

Whilst acknowledging other use and development such agriculture, forestry, mining and marine farming is outside of these planning policies, a more integrated approach to the Tasmanian Planning Policies would be appropriate, given the complex inter-relationships between the issues. In saying that, we are delighted to see the Policy on catchment management, and hope this facilitates such integration, and is implemented as soon as practicable.

'Support the collaboration and coordination of catchment management across the State and implement integrated catchment management that considers the downstream impacts of land use and development on water quantity and quality, and freshwater, coastal and marine environments'

We also encourage the reinstatement of implementation guidelines, as included in the previous draft. These sections were empty of content but had significant potential in terms of just how each policy would flow to other planning instruments.

The development of the TPPs is an excellent opportunity to build confidence in the Resource Management and Planning System to protect water quality, biodiversity and therefore our quality of life, however we believe that many of the strategies within the draft TPPs need more work for clarity, consistency, certainty and integration. We also request they be implemented as soon as practicable.

Our response covers the following:

- Consideration of PESRAC;
- The *State Policy on Water Quality Management 1997* in relation to the TPP development process;
- TPP Implementation;
- Climate Change Policy; and
- Notes on Overland Flow Paths and Flooding;
- Draft TPP 1.0 Settlement;



- Draft TPP 2.0 Environmental Values;
- Draft TPP 3.0 Environmental Hazards; and
- Draft TPP 5.0 Physical Infrastructure.

Thank you for considering this submission from the Derwent Estuary Program and we look forward to the integration of our suggestions into the TPPs. We are available for discussion on any matters raised.

Yours sincerely,

Ursula Taylor Derwent Estuary Program, CEO



Consideration of PESRAC

We have considered the *Premier's Economic & Social Recovery Advisory Council Final Report* March 2021 (PESRAC report) in our response to the draft TPPs. It is acknowledged the PESRAC is not part of the RMPS but it is an important guidance document for the State making comment and recommendations on the same topics as the TPPs. We encourage you to make this integration as well. For example on page 68 under 'Water', 6.2 'A Vision and Culture of Sustainability for Tasmania', Section 6 'Environment and Sustainability' it states:

' ... To meet future demand for water and ensure that water quality is sufficient for our agricultural and environmental needs, we need a broader water resource policy approach that addresses resource allocation, water security and water quality, setting specific targets and binding the State Government to monitoring and reporting, as well as more transparency. This should be an immediate priority.'

In the same section under 'Practical and strategic sustainable development for economic and social growth', it states:

'... Other areas are within the State Government's control and require specific measures to drive outcomes. Tasmania's air and water quality standards are in this category. We can't rely on national and international factors to drive these outcomes – we have to do it ...'

And the Recommendation of Section 6 includes:

'The State Government should develop a sustainability vision and strategy for Tasmania, with ambitious goals, and concrete targets and actions.

The strategy should immediately prioritise specific frameworks for: ...

• water resource allocation, security and quality; ...

The TPPs are an excellent opportunity to progress this recommendation.

The State Policy on Water Quality Management 1997 in relation to the TPP development process

Our principal response to the draft TPPs is to seek clarity on the articulation of these policies with the *State Policy on Water Quality Management 1997 (SPWQM)*, in so far as the new TPPs are required to be consistent with the three long standing state policies (and the National Environmental Protection Measures (NEPMs)).

Under the SPWQM, the Environment Protection Authority (EPA) Board is responsible for setting Water Quality Objectives for the protection of water quality in Tasmania, as referenced on their website. Implementation of the SPWQM has occurred through the work published by the EPA in August 2021, Default Guideline Values (DGVs) for Aquatic Ecosystems of Tasmanian Inland Waters. Water Quality Objectives have also been set by the EPA Board following the process in the SPWQM.

We request an explanation of the state government's intended legal pathway forward regarding the TPPS and the SPWQM. We are aware that the SPWQM has not realised its full



potential however as the EPA Tasmania, the government agency responsible for the SPWQM, has started the process of implementing this policy, we believe this needs to be acknowledged in the TPPs.

Climate Change Policy

The Climate Change Statement within each TPP is important. Suggest a stand alone Climate Change TPP also as a way of integrating them with the other TPPs. It is understood that those relying on the policies are required to consider them as a set, that there is no hierarchy, however having integration of each policy could be done using the vehicle of climate change. The review of the TPPs is required under the Act only every 5 years. Given the urgency for action and the unpredictable nature of climate impacts, having a stand alone Climate change TPP may be useful for currency and responsiveness.

TPP implementation

The previous draft TPPs included the opportunity for specific implementation guidance for each policy, which has been abandoned in this draft. We understand that how these policies will be implemented will unfold via the Regional Land Use Strategies into the Tasmanian Planning Scheme, however it would be useful to be provided with some clarity about the government's thinking on implementation at the outset to build confidence in, and provide direction on, the purpose and efficacy of these policies.

Whilst there were no actual implementation guides provided in that previous draft, it is unfortunate to lose that opportunity for specific guidance, and provide only a 'General Application' guide instead.

The application principles under 'General Application' (pages 3-4) are somewhat confused in relation to the 'objectives' and 'strategies'; consistency would aid in applying the principles. For example, principle 3 and 7(d) (pg 4) – are the TPPs to achieve strategies or objectives?

The policies would benefit from firmer language to provide certainty and direction from the State Government. For example, as discussed below, in the Environmental Values section, strategy 2.2.3 (4e) directs to ... not **significantly change** the rate and quantity of stormwater or increase pollutants entering the water (emphasis added). Allowing for any pollutants, rather than pollution reduction, in a strategy of a policy of this standing does not achieve the objective of the policy, the objectives of the RMPS, or the overall direction these policies need to take planning to sustain Tasmania.

Notes on OFPs and Flooding'

A note on Overland Flow Paths (OFPs). This submission highlights the need for protection of OFPs in a number of parts of the TPPs. OFPs are not necessarily discrete human made hard infrastructure but are still essential elements of stormwater system physical infrastructure. These pathways for water to move in flood events require particular understanding, mapping and protection. Protection of urban overland flow paths so that they can function, whilst protecting people, place and natural values from this necessary function, needs to be identified and implemented in the hazard and physical infrastructure TPPs. Green / Blue infrastructure including Water Sensitive Urban Design solutions such as constructed wetlands, are also physical infrastructure.



A note on Flooding: Flooding does not seem to have been associated in the development of these policies with increase of impervious surfaces and generation of stormwater. As we have limited control over an increase in rain intensity, the TPPs should provide planning pathways for best practice management of, constraints on, and mitigation measures for runoff from impervious surfaces. There are so many opportunities to do this with clear, high level policy direction which is currently lacking.



Draft TPP 1.0 Settlement

1.0 Settlement, 1.0.1 Principles and Policy context. [quite a few typos in the last two paragraphs.]

... For example, strategies that promote networks of green spaces also increase[s] rain-absorbing surfaces, allowing cities to better manage flooding from intense storms.

This principle is supported. Important to use stronger language than to just 'promote' – a state planning policy needs to be leading.

Suggest after 'that' change to '... accommodate overland flow paths and integrate networks of green spaces to increase rain-absorbing areas, allowing cities to better manage and recover from intense storms.'

1.1 Growth ... 1.1.3 Strategies ... 2. Plan for growth that will: ...

b) prioritise the development of land that maximises the use of available capacity within existing physical and social infrastructure networks and services; ...

d) discourage the development of land that:
i. is not well serviced by existing or planned physical and social infrastructure, or that is difficult or costly to service;
ii. is subject to environmental hazards where a tolerable level of risk cannot be achieved or maintained;
iii. contains high environmental or landscape values;
iv. is agricultural land, especially land within the more productive classes of agricultural capabilities; and
v. is used for extractive industries or identified as strategic resource areas and deposits.

Re (b) above – needs inclusion of a caveat about infrastructure capacity – whether stormwater infrastructure (including protection of overland flow paths) has capacity for this kind of intensification etc needs to be considered at the outset.

Suggest add after land '... with infrastructure capacity ...'

Re (d) above: Replace 'discourage' with 'prevent'.

(d)(ii) Opportunity to explicitly identify overland flow paths – they are not a natural hazard but need to be identified as a component of existing physical infrastructure.

(d)(iii) – replace 'contains' with 'has' – land doesn't contain environmental or landscape values, it has them. Suggest additional point after (iii): is required for overland flow paths of stormwater in high rainfall events.

(d)(iv) Opportunity to link this with the *State Policy for the Protection of Agricultural Land 2009*.

(d)(v) What role does the RMPS have in protecting extractive industries to warrant this specific strategy? Important to specify here where these strategic resource areas and deposits have been identified, to illustrate how this is part of the planning system.



1.1 Growth ... 1.1.3 Strategies ...

3. Identify regional settlement hierarchies based on: ...

g) capacity and cost-efficient upgrading of physical infrastructure. ...

And

5. Actively address impediments to infill development, particularly in the major urban centres.

As above, need acknowledgement of overland flow paths – allowing for OFPs is very cost efficient (as in 3. (g)), and will likely be identified as an impediment (as in 5), but need identification as assets needing protection. It would be ideal to have OFPs mapped in all urban settlements.

6. Promote the preparation of structure plans that provide for the effective planning and management of land use and development within a settlement, or part of a settlement, that, as a minimum, considers:

... f) the use of existing physical infrastructure and the logical and efficient provision of additional physical infrastructure; and

Support this point however needs to start with 'Require' not 'Promote'

(6)(f) please add after additional '... and upgraded ...' – much of the work required to make stormwater systems not an impediment to settlement plans requires maintenance and upgrade rather than 'additional'.

8. Land identified for proposed growth on land located outside an existing urban or settlement growth boundary must be strategically justified, based on:

... b) site suitability, such as having regard to identified values, agricultural capabilities, physical constraints and environmental hazards ...

Suggest adding after '*identified*' '... cultural, environmental and landscape ...' – to be clear about what values are being considered (as per 1.4.3 (5)(f)).

and social infrastructure networks and services ...

Suggest refining this strategy component to ensure the 'existing' infrastructure can provide for best practice use – ie. Its sufficiency or adequacy to not increase environmental impacts if growth added, not just that infrastructure exists.

11. Provide for and identify preferred development sequences in areas of growth to enable better coordination and more cost-effective planning and delivery of physical infrastructure.

Suggest removal of 'cost-effective'. This does not consider the triple bottom line – economic, social and environmental. Suggest using 'best practice' or other alternative term allowing for other considerations other than just cost – the cheapest solution now might result in very expensive impacts in the future. This is the legacy of stormwater management now – hardening and piping of waterways and drainage lines has resulted in significant flooding and environmental degradation and is now being undone and retrofitted at great cost to the community.



Please add a Growth strategy to address increase in impervious surfaces in settlements. It is important that the RLUs and the TPS provide mechanisms to control increases in impervious surfaces and the requisite increase in flooding and damage to the natural environment. Performance Criteria could include conversion of impervious to pervious and support for development that only increases impervious to the minimum required. The inability of the planning system to control driveways, sealed landscaping and parking areas is problematic but solvable.

1.2 Liveability, 1.2.3 Strategies

1. Provide for a network of accessible, interlinked and inviting open and green spaces close to and within residential areas and activity centres to encourage active lifestyles, connection with nature and social interaction.

Please add 'robust,' after 'accessible'. Many open and green spaces in urban areas need to be protected and not have people in them to protect their viability, including threatened species, especially with increasing climate change impacts (for example, saltmarshes).

Acknowledge point 7 (as below) however 4. is about access and use of green spaces.

7. Support measures to mitigate the impacts of climate change on urban environments by encouraging urban forests, street plantings, garden roof tops (green roof), water sensitive urban design and integration of shade and water features into public spaces.

Support this strategy, acknowledging that contemporary and best practice stormwater management is key to all of these components. We suggest reworking to include the following:

- Storing water within soil (natural replenishing of ground water and percolation),
- multi-use of facilities (like ovals) for storage of flood water,
- acknowledging the importance of surface and ground water for ecosystem restoration and refugia areas,
- requiring urban water storage as well as detention and,
- retaining trees on private land.

These measures are relevant to private as well as public land, especially– please include / make clear.

Under 1.4 Settlement Types, 1.4.3 Strategies

3. Facilitate the provision of social and physical infrastructure to support the seasonal fluctuations in populations experienced by coastal or other settlements that are characterised by holiday homes.

This is an important strategy for water quality as the 'sharing economy' increased intensity of use of holiday homes using on-site waste-water systems that are aged and / or not maintained adequately, is having serious impact on freshwater systems and ground water. A review of the adequacy of health controls on these systems is warranted.



Suggest 'adequate' or 'upgraded' or 'fit for purpose' in front of physical infrastructure.

5. Avoid allocating additional land for the purpose of rural residential use and development, unless:

... c) the location of the land represents an incremental, strategic and natural progression of an existing rural residential settlement;

... e) growth opportunities maximise the efficiency of existing services and physical infrastructure; ...

Noting this list ends with an 'and' so all the of the points must be considered when determining if rural residential use and development is appropriate.

5 (c&e) needs further qualification.

The previous version included the following point which would be helpful to keep, with the suggestion as below.

5. Encourage higher density housing in locations that:

... e) does not impact environmental values and is not constrained by topography and environmental hazards.

Is 'environmental hazards' in this point intended to include increased flood hazard from increased impervious areas from higher density housing? Suggest additional point something like '... does not increase runoff from impervious areas that cannot be accommodated in existing stormwater systems'.

1.6 Design, 1.6.3 Strategies

3. Support sustainable design practices that are energy and resource efficient, address temperature extremes and reduce carbon emissions, including:

... b) implement sustainable water and energy solutions for climate change adaptation, including water sensitive urban design and renewable energy production;

Support this strategy; please replace 'Support' with 'Require'. Acknowledging that for water sensitive urban design implementation to be part of our sustainable design practices this will require inclusion of best practice stormwater controls in the RLUSs and TPS (or adequate inclusion in a parallel and integrated process) and a major upgrade / upskill in how stormwater is currently dealt with in Tasmania.

Also here is an opportunity to introduce at a high level the necessity for stormwater harvesting and re-use, and infiltration of rainwater into the cityscape – ie. the sponge city concept rapidly gaining traction everywhere else.

7. Promote subdivision design that provides a functional lot layout that:

a) is responsive to topography, site constraints and environmental values and hazards;

This strategy is missing mention of sustainable infrastructure design – lot layout that allows for water retention in the landscape, and keeping cut, fill and retaining roads (with huge



carbon footprint) to an absolute minimum (the more the land is cut into the more problems with drainage). Just being 'responsive' gives no guidance on sustainable action or climate change mitigation.

8. Encourage the design, siting and construction of buildings to positively contribute to:

... f) maintaining water quality by promoting best practice stormwater management approaches;

Support this strategy; please replace 'promoting' with 'requiring'. The word 'approaches' is redundant – replacing with '... for quantity and quality' would be more meaningful and provide clarity.



Draft TPP 2.0 Environmental Values

2.0.1 Policy Context, Paragraph 4:

The Environmental Values TPP seeks to protect environmental values by adopting, where relevant to the specific environmental value, the following principles:

1. identify environmental values and determine their significance;

2. avoid designating land, that contains significant environmental values, for land use and development that will detrimentally impact those values;

3. minimise the impact of land use and development on environmental values where

avoidance is not possible or impracticable; and

4. where possible, apply offset where the impacts cannot be minimised.

Re point 3 above – what criteria would be used to decide whether this is not possible or impracticable?

2.0.2 Climate change statement

Paragraph 1:

Projected changes to Tasmania's future climate will have a variety of impacts on our environmental values. These include:

• significant changes in the amount of rainfall, including seasonal variation and spatial distribution;

Please add '... and intensity' after 'amount'.

Paragraph 4:

... Waterways and wetlands may experience times of flooding or reduced flow rates. This may impact aquatic habitats and present issues for water security. Periods of either excessive high or low soil moisture may stress native flora and fauna. ...

Query the use of 'may' here. Sounds vaguer than current climate science tells us. Suggest 'Waterways and wetlands are likely to experience changes to flows and floods.' In the second and third sentences suggest changing 'may' to 'will'.

Paragraph 6:

Because there are many unknowns regarding climate change, the planning system needs to plan for both predicted scenarios and remain responsive to unforeseen circumstances. The Environmental Values TPP seeks to address this by:

- supporting early action against native habitat loss;
- promoting connectivity between vegetation to support viable ecological processes

and build climate change resilience;

• protecting water quality and flow regimes to build the resilience of aquatic

ecosystems;

• protecting wetlands, riparian and foreshore areas including intertidal areas;



• considering the vulnerabilities of ecosystems and natural processes to the projected future climate and spatially applying parameters to identify, protect and prioritise communities at high risk; and

• enabling retreat pathways for ecosystems.

In point 1 please change 'habitat' to 'ecosystem'.

Re point 4 – please clarify what these elements are being protected from (infill?, 'protective batters?, flooding? storm surge?

Re point 6 - Allowing for refugia or retreat pathways, for example coastal refugia (as will be required for Cornelian Bay for example) is otherwise missing from the TPPs.

2.1 Biodiversity, 2.1.3 Strategies

General comment – the use of 'promote' and 'consider' as the verbs for these strategies indicates a lack of robustness or seriousness about these strategies.

2. Unless there are significant social or economic benefits, avoid designating land for purposes that will require substantial land clearance in areas identified as having high biodiversity values.

How will *significant social or economic benefits* be determined – suggest this phrase is removed.

Remove 'substantial' from this statement. Any land clearance in areas of high biodiversity value is not acceptable. Once cleared, the water regime is changed forever. The planning system has allowed a death by a thousand cuts to ecosystems and their water systems by its case by case assessments. This TPP provides a real opportunity to stop land clearance and irreversible water degradation in these areas.

5. Promote use and development to be located, designed and sited to avoid impacts on biodiversity values, and where avoidance cannot be achieved, or is not practicable, the impacts to biodiversity values will be minimised, or offset.

This is not a meaningful strategy to achieve the biodiversity objective— this is allowing for inappropriate use and development. Delete second part, after 'values'.

7. Promote use and development of land that prevents or minimises the spread of environmental weeds and disease.

Suggest insert after 'land' '...and ongoing best practice land management ...'

The current state government 'Washdown Guidelines for Weed and Disease Control – Machinery Vehicles and Equipment' is from 2004. We have not seen it referenced or used by anyone in relation to development in Tasmania. This is a good indicator of how this concept is ignored. It's great to have it as a strategy and now it needs investment and resourcing.

8. Protect and enhance areas that provide biodiversity and ecological services that maximise opportunities for carbon storage.

Provide details about what is meant by these 'services'.



12. Identify and enable retreat pathways for endangered ecosystems in coastal zones.

Do the ecosystems enabled by this strategy have to be already endangered? Please adjust to accommodate more than that.

Suggest an additional biodiversity strategy:

Consider impacts of linear infrastructure (roads, water diversions and cut-off drains, trenching, transmissions lines etc) on biodiversity.

2.2 Waterways, Wetlands and Estuaries, 2.2.2 Objectives:

To protect and improve the quality of Tasmania's waterways, wetlands and estuaries.

Add after 'quality' '.. and resilience ...'

2.2.3 Strategies

1. Identify areas that support natural systems within waterways, wetlands and estuaries, including their riparian zones and groundwater recharge areas

Add after 'Identify' '... and protect ...' – no point in identifying if you do not protect.

How will groundwater recharge areas be identified? How will this flow through to the planning scheme? Suggest change first half of sentence to:

'Identify and protect natural systems integral and within waterways, wetlands and estuaries

2. Avoid designating land in, or around, waterways, wetlands and estuaries for use and

development that has the potential to cause point source or diffuse pollution and

would require considerable disturbance of riparian or foreshore vegetation and soil,

unless the use and development:

a) relies specifically on being located within close proximity to aquatic

environments;

b) is for flood mitigation measures; or

c) has considerable social, economic and environmental benefits;

and can demonstrate that the risk of environmental harm can be managed.

This introduction sentence is confusing – it deals with two different matters. Suggest to at least remove 'considerable'. Suggest changing the whole strategy to:

'Avoid designating land in, or around, waterways, wetlands and estuaries for use and

development that has the potential to cause point source or diffuse pollution.

Avoid designating land in, or around, waterways, wetlands and estuaries for use and development that would disturb riparian or foreshore vegetation and soil.



The following use or development may be considered if impact can be designed to be consistent with sustainability goals of the TPPs and impact is demonstrated to be minimal – that which relies specifically on being located within close proximity to aquatic environments, is for best practice flood mitigation measures where relocation of development cannot be achieved.'

Remove (c) and final phrase - *can demonstrate that the risk of environmental harm can be managed* – this is much too vague.

3. Encourage the protection of waterways by retaining, creating or improving vegetated riparian zones to maintain their natural drainage function and minimise unnatural or accelerated erosion of stream banks while providing riparian habitat corridors and protecting landscape values.

Replace 'Encourage the protection' with 'Protect and conserve'.

Support this strategy - please replace 'minimise' with 'prevent'.

Change 'stream banks' to 'waterway banks'. Stream implies small waterways – this strategy applies to all waterways

4. Use and development located on land in, or around, waterways, wetlands and estuaries will:

... b) promote the retention and restoration of, and linkages between, terrestrial

and aquatic habitats;

... d) avoid land disturbance, or manage soil erosion and changes in sediment loads entering the water caused by land disturbance; ...

Re 4(b) please replace 'promote' with include'.

Re 4(d) 'avoid land disturbance **or** manage' is not a robust strategy. Suggest addition of 'and prevent' ie '... avoid land disturbance, and prevent soil erosion ...'

Change '... and changes in sediment loads entering the water...' ... and sediment movement and pollution into waterways and stormwater systems ...'.

This strategy will be helpful for improving erosion and sediment control practices in Tasmania. These practices are almost non-existent in Tasmania but have huge emphasis and compliance elsewhere in Australia. Sediment from development sites has an enormous impact on water quality and natural values in Tasmania and could be controlled with appropriate policies and planning. The Derwent Estuary Program and the Tamar Estuary and Esk Rivers Program have just rewritten the Sediment and Erosion Control Fundamentals for Tasmania, to encourage improved practices. This strategy is the opportunity to illuminate and act on this problem. Runoff from development sites into stormwater is a major source of diffuse pollution entering our estuary.

e) not significantly change the rate and quantity of stormwater or increase

pollutants entering the water; and

Strongly suggest removing 'significantly'. This is the most important change request for this TPP. Reducing pollutants and potentially even reducing stormwater quantity would be appropriate. Suggest:



'Manage with best practice any new rates and quantities of stormwater entering waterways, wetlands and estuaries to ensure stormwater output will not negatively impact the receiving waters and environments. Prevent pollutants from entering these systems.'

Support the collaboration and coordination of catchment management across the State and implement integrated catchment management that considers the downstream impacts of land use and development on water quantity and quality, and freshwater, coastal and marine environments.

This is excellent. How will this be implemented Statewide, and consistently?



Draft TPP 3.0 Environmental Hazards

3.0.1 Policy Context

Paragraph 4:

"... While the planning system has a role to play, it is also limited in what it can achieve. It cannot apply retrospectively to address planning decisions that were made under former planning regimes but it can provide for current and future land use planning decisions to respond to risks. ...'

While the above statement is understood, this is the level of policy at which consideration is required to include adaptation and retro-fitting of existing development and urban landscapes as part of the big picture of reducing hazards to people and environmental values.

Paragraph 6:

'... The Environmental Hazards TPP seeks to consider hazards early in the planning system which will assist in protecting life and property, reducing the financial and emotional cost to the community and decreasing the burden for emergency management caused by environmental hazards. ...'

Needs natural values included – suggest: '... protecting life, property, natural values; reducing the financial ...'

Paragraph 6 (point 7 & 8):

To achieve this, the TPPs apply the following set of principles to drive the planning policy response to environmental hazards:

...

• hazard mitigation measures must consider and seek to minimise the impacts on other identified values; and

• regulation of use and development in areas subject to environmental hazards will reflect the level of exposure to the risk of harm caused by the environmental hazard.

Suggest for dot point 7:

...

• hazard mitigation measures must consider and seek to minimise the impacts on other identified values, **including ecosystem processes and natural values**; and

Suggest for dot point 8:

• regulation of use and development in areas subject to environmental hazards will reflect the level of exposure to the risk of harm caused by the environmental hazard. ...

This statement needs clarifying and explanation – how will this 'regulation' work – under what legislation / agreements; how will this reflection be determined?

3.0.2 Climate change statement



Significant changes in seasonal and regional rainfall patterns, an increase in rainfall intensity and associated flooding, higher average and more extreme temperatures, storms and wind and longer, more intense fire seasons will impact the frequency and intensity of hazard events. ...

Above opening sentence is confusing, Suggest:

Climate change will impact the frequency and intensity of hazard events. The changing climate will result in significant changes in seasonal and regional rainfall patterns, an increase in rainfall intensity and associated flooding, higher average and more extreme temperatures, storms and wind and longer, more intense fire seasons

Please make paragraph more consistent in language with section 2.0 Environmental Values 2.5 Coasts

Paragraphs 3 and 4 – please provide more information on *sea level rise planning allowances* and *measures*. In paragraph 4 please add (additional shown in bold): *'… built form and natural values, …'*

Paragraph 6 – 'evidence-based data'? Please replace with 'scientific data'.

Dot point 1 after paragraph 6 '*natural hazards*' please replace with '*environmental hazards*' for consistency of language.

Dot point 4 – 'consider protective works' please add a qualification like 'consider protective works using best practice considering all values'.

3.1 Bushfire – needs natural values / ecosystem protection added throughout.

Strategy 9 mentions 'endorsed plan' but no qualification by whom. And specific mention of 'fuel reduction burns' seems quite old fashioned given the enormous debate around this practice now. Suggest replace with ... 'using best practice, contemporary, long term strategic vegetation and ground water and surface water management including with first nations people's input'.

3.2 Landslip

Strategies – point 4 – please change to '... risk of harm to people, property **and the natural environment** associated with the landslip hazard is tolerable.'

Suggest additional point 6: *Manage cumulative changes to groundwater and waterways to not increase landslip risk.*

3.3 Flooding.

3.3.2 Objective:

To minimise the impact of flood hazards that have the potential to cause harm to human life, property and infrastructure and to reduce the cost to the community as a result of flood events.

Is missing reference to harm to environment. Suggest inclusion of '*natural environment*' after '*property*.'

3.3.3 Strategies ...



3. Consider and plan for the cumulative impacts of use and development on flooding behaviour.

Support this statement, however request explanation of 'cumulative impacts' in this context. Does this include mitigation measures such as storage and detention? Reducing new impervious surface increase to only strictly necessary? Does it link to planning to reduce existing impervious areas, or tree and other vegetation retention? What about impact on receiving environments from flood water quality?

3.3.3 Strategies

4. 'Avoid locating, or intensifying, incompatible use and development on land subject to flood hazards unless hazard reduction and protection measures are considered and, where appropriate, incorporated into the planning and ongoing functioning of the use and development to reduce the level of risk to people, property and infrastructure to a tolerable risk level.'

Replace with:

4. 'Avoid locating, or intensifying, incompatible use and development on land subject to flood hazards. If hazard reduction and protection measures are considered appropriate, they must be incorporated into the planning and ongoing functioning of the use and development to reduce the level of risk to people, property, natural values and infrastructure to a tolerable risk level, considering the intended life of the development.'

3.3.3 Strategies 7(b) ...

b) the impact on environmental values are considered and minimised;

Please change to:

b) will not result in impacts on environmental values;

Providing such vague instructions as considered and minimised at this level of policy makes the strategy ineffective.

3.3.3 Strategies 8.

Support the use of Water Sensitive Urban Design systems to mitigate flooding and manage peak flows in urban catchments.

Suggest elevation of this strategy to earlier in the list – very important so needs stronger verb – Tasmania is so far behind with WSUD it needs requiring not suggesting. Also suggest change to:

8. Require the use of Water Sensitive Urban Design to mitigate flooding, manage peak flows in urban catchments, and reduce impacts on water quality on waterways and receiving waters from flooding.

3.5 Contaminated Air and Land

Why is water excluded from this hazard section? The movement of contamination through ground water and surface water is a serious hazard in Tasmania. Water is contaminated from existing sites as they are, and also from disturbance of land.



Draft TPP 5.0 Physical Infrastructure

Stormwater management is included in the 5.1 Provision of Services, Objective (5.1.2) however stormwater systems (including overland flow paths) are throughout every settlement and road networks therefore warrant elevation in this policy.

Under 5.0.2 Climate change statement:

... The TPPs can promote climate-resilient infrastructure by:

... identifying and mapping current and projected areas subject to hazards, such as coastal erosion and inundation, flooding and bushfire; ...

Mapping of overland flow paths (OFPs) within settlements is something that has been largely ignored up until now. Identifying, mapping and protecting OFPs should be a specific hazard and asset class this policy addresses. The continued ignoring of this facility / process in our settlements presents both a significant hazard and very high cost to retrofit around. Current new developments and intensifications of use are being approved within OFPs due to lack of recognition.

Suggest adding after *flooding (including overland flow paths)* ... to the above point.

Also under the same heading 5.0.2:

'... The TPPs can promote climate-resilient infrastructure by:

.. inclusion of risk mitigation measures.'

We are concerned the brief statement may be used in a misguided way to 'protect' settlements and infrastructure that would otherwise be better relocated or otherwise adapted (for eg. inappropriate use of infrastructure such as levy walls which may have negative impacts on natural processes and create further hazards).

Suggest inclusion of at least 'appropriate' before 'risk', but preferably concluding with '... considering long term environment and community impacts.'

Under the same heading 5.0.2:

The Physical Infrastructure TPP supports the provision of well-planned and welldesigned infrastructure that can reduce emissions and take advantage of emerging opportunities in a low emissions future by: ...

Provides an opportunity to promote the use of new low impact / low carbon materials – recycled concrete and plastics in infrastructure including pervious road and other pavements.

Suggest after second 'infrastructure' add ' ... using the best low impact low carbon recycled and repurposed materials (supporting local manufacturing of these) ...'

Or similar phrase after 'opportunities ... '.

(Editing note paragraph 2, section 5.0.2: the word *violent* has been used in place of *severe* as has been used elsewhere in the document, did you want to change that?)

Under 5.1.3 Strategies (please see comments after each):



1. Identify, allocate and protect a sufficient amount of appropriately located land to accommodate infrastructure that will provide for the existing and future service needs of the community.

The requirements for location and nature of land required for contemporary and best practice 'sufficient' stormwater infrastructure is a rapidly changing field. Use of constructed wetlands and de-hardening of systems requires different thinking than in the past.

Suggest: change 'infrastructure' to 'best practice infrastructure provision'.

2. Identify whether existing infrastructure has the capacity to deliver services to accommodate growth and prioritise designating land use for the purpose of making efficient use of that available capacity.

Much of the urban stormwater network is failing to convey the runoff from increasing frequency and intensity of rain. This strategy needs to be about more than just 'capacity' – ie. Robustness to this kind of increased impact. Please ensure **future capacity scenarios** are required to be considered, not just existing. Strategy needs rewording to ensure planning and budgeting for increased capacity and robustness is identified.

3. Where there is no infrastructure, available infrastructure capacity or noninfrastructure solution, promote the most logical and cost-effective solution to deliver services to growth areas while minimising environmental impacts.

This strategy either needs to be deleted or re-worded to be consistent with other TPPs for eg. See paragraph 4 in 1.0.1 Policy Context of 1.0 Settlement TPP. See also the strategy 4 which makes sense.

A growth area requires adequate service provision. Fundamentally 'cost-effective' should be 'effective' as the most effective solution to protect environmental values such as water quality might not be the cheapest solution in monetary terms at the outset. Long term environmental degradation from a 'cost-effective' solutions may result in serious environmental damage and exacerbated future costs that could have been avoided with an 'effective' solution.

It should be noted that soft or green-blue stormwater infrastructure should not be considered 'non-infrastructure' solutions – these are assets and require mapping and maintenance.

5. Facilitate developer contributions to service new use and development to be transparent, fair and reasonable, providing for equity between users.

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6. Provide an integrated approach to the planning and engineering design of new subdivision and subsequent use and development, promoting the coordinated and efficient provision of infrastructure.

Currently such an integrated approach does not exist – the planning scheme allows only for case by case projects. Even if this translates into the RLUSs, the TPS does not consider cumulative impacts. How will this suggested integrated approach be supported?



7. Provide for reticulated sewerage at the time of subdivision or require lots created by the subdivision are capable of adequately treating and retaining all domestic wastewater within the boundaries of each lot.

The first part is already required via TasWater however how will the second part of this strategy be required, and why does it identify only domestic wastewater? Existing on-site wastewater, even systems adhering to standards, contribute significant faecal and other pollution (phosphorous from detergents etc) loads to surface and ground freshwater. Where on-site wastewater and on-site stormwater are to be kept within a lot – there is a generally low standard of design, and limited consideration of climate change impacts. There is no adequate follow up for maintenance of the on-site stormwater disposal once installed, resulting in impacts on on-site wastewater – this needs regulation. Cross-contamination of sewer into stormwater is a significant issue for Tasmania – perhaps a more useful strategy would identify this problem at TPP level so the RLUS and the TPS can act on the existing problem and prevent further exacerbation of the problem.

10. Encourage the protection of significant existing and future water, gas, electricity, sewerage, stormwater and telecommunications infrastructure assets and waste disposal and resource recovery facilities, sites and infrastructure corridors from sensitive and incompatible use and development encroaching those assets, facilities, sites or corridors.

This strategy has been weakened from the previous draft – It has gone from 'Protect ... ' to 'Encourage the protection ... ' Please change to former.

This is a very important strategy – an opportunity to raise 'stormwater' versus 'drainage' – the latter having the advantage of including concentrated runoff from non-urban environment i.e. Stormwater is only generated in urban environments. As mentioned previously, Overland Flow Paths are usually not identified as assets to protect – needs specific mention in this context of sensitive and incompatible use and development.

Please change to '... stormwater and drainage (including overland flow paths) and ...

11. Encourage the siting, design, management and rehabilitation of waste disposal facilities to prevent or minimise contamination of groundwater and surface waters, litter, odour, dust and noise.

This should be a '*Require*' strategy not an '*Encourage*' strategy. Please add 'stormwater systems' after 'groundwater'. Suggest this rearrangement of words is clearer and stipulates prevention of contamination (not minimising) ' ... to prevent or minimise litter, odour, dust and noise, and prevent contamination, of groundwater and surface waters.'

12. Facilitate access to a variety of recycling stations to encourage community participation in recycling and waste reduction.

Instead of 'Facilitate access' to these we suggest 'require provision of'. This is important in the water quality space as it is anticipated that the introduction of the Container Deposit Scheme will significantly reduce plastic pollution, as long as there is access to these facilities. With the planning system requiring the development as well as access to these facilities will ensure success of schemes such as the Container Deposit Scheme.