



**Subject:** FW: CORRECTION AND ADDENDUM TO PPAS SUBMISSION ON SUSTAINABLE ENVIRONMENT STRATEGY  
**Date:** Monday, 4 June 2018 1:56:05 PM

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[Redacted text block]

[Redacted] Sustainability

**Sent:** Monday, 21 May 2018 8:38 AM

**To:** [Redacted]

**Subject:** FW: CORRECTION AND ADDENDUM TO PPAS SUBMISSION ON SUSTAINABLE ENVIRONMENT STRATEGY

Addendum

[Redacted text block]

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**Sent:** Sunday, 20 May 2018 10:23 PM

**To:** Sustainability <[enviro@portphilip.vic.gov.au](mailto:enviro@portphilip.vic.gov.au)>

**Subject:** Fwd: CORRECTION AND ADDENDUM TO PPAS SUBMISSION ON SUSTAINABLE ENVIRONMENT STRATEGY

This addendum to the PPAS submission was also sent to an incorrect address.

Colin Smith

Begin forwarded message:

[Redacted text block]

**Subject: CORRECTION AND ADDENDUM TO PPAS SUBMISSION ON SUSTAINABLE ENVIRONMENT STRATEGY**

**Date:** 17 May 2018 at 11:43:08 pm [Redacted]

[Redacted text block]

Two points have been brought to my attention since I submitted the PPAS response earlier today:

A typo on page 8: reference to 'PPAS' should be 'PPEF'

A request by a member to add a recommendation:

" Council should give it's support to the waste to energy proposal since it is consistent with, and acts on, all the council's aspirations- dealing with waste, advancing the cause of waste water recycling and providing energy for community heating and cooling - a virtuous circle if you like which could and should be funded by the identified major polluters as well as SE Water."



Secretary  
PPAS

**A SUBMISSION**

BY

**THE PORT PHILLIP ALLIANCE FOR SUSTAINABILITY**

REGARDING

***A SUSTAINABLE FUTURE***

**THE CITY OF PORT PHILLIP'S DRAFT SUSTAINABLE  
ENVIRONMENT STRATEGY 2018-2028**

ISSUED 6 APRIL 2018



## **EXECUTIVE SUMMARY**

*Over the past decade, Council has failed conspicuously to achieve the sustainability targets it set for itself. However, the current Council has taken significant steps towards doing better – this draft SES being one of them.*

*Our comments are arranged under the 'key priority' headings of the draft SES.*

### **REGARDING A GREENER, COOLER, MORE LIVEABLE CITY**

*Tree planting in CoPP leaves much to be desired as regards:*

- *Targets for canopy cover*
- *Selection of species appropriate for a dryer climate and to location*
- *Measures to ensure soil health and to maximise soil moisture – especially*
- *Surface permeability.*

*There is also - in CoPP as elsewhere - significant non-compliance by developers with energy efficiency and ESD requirements. Better enforcement – by independent inspection and fines for non-compliance - is required. Fines could be used to fund energy efficiency and ESD elsewhere - especially in low-income and rental accommodation.*

### **REGARDING A CITY WITH LOWER CARBON EMISSIONS**

*MREP will abate about 87% of Council's emissions. It is important, however – for exemplary, economic and environmental reasons - that Council nevertheless continues to increase energy efficiency and renewable generation in its own building stock.*

*Community targets need to be ambitious, and guided by the science. The proposal for a community-funded offsite renewable energy project will be of particular interest for apartment dwellers – but also to other residents. And supporting low income households to access solar with suitable repayment and financing arrangements deserves a high priority.*

### **REGARDING A CITY ADAPTIVE AND RESILIENT TO CLIMATE CHANGE**

*We are convinced that the inspiring of community action in CoPP calls for an energy foundation – and much preferably a Port Phillip Energy Foundation - tasked to pursue abatement and assist adaptation.*

*The Ecocentre is a valuable institution for community engagement. We urge Council to return to its original schedule for its redevelopment by 2022.*

*We consider that there needs to be much more emphasis, in public education, upon CoPP's vulnerability to flooding, and how people can be prepared.*

## *REGARDING A WATER SENSITIVE CITY*

*The 2010 Water Plan fell short in its achievements because it underestimated the threat of flooding and lacked an implementation strategy and adequate financial commitment. This has left us with a lot of disconnected ambitions rather than a Water Sensitive City Plan.*

*We urge Council to address, as a matter of urgency:*

- Integrated Water Management (IWM) - the concept of the city as a sponge - as its key principle for water management across the CoPP;*
- Completion of an updated, comprehensive water balance analysis for the city;*
- Initiation of a new Water and Flood Management Plan for 2019 – 2028;*
- Monitoring and commitment to achieve the 2066 target for water pollution reduction;*
- Catchment targets for flood mitigation and to reduce coastal vulnerability;*
- Enforcement on private land of IWM measures mirroring those on public land.*

*Proposed upstream developments on Elster Creek are good start, but no more than that.*

*The Marine and Coastal Bill will facilitate changes in the Port Phillip Planning Scheme.*

## *SOME FURTHER THOUGHTS*

*A process for ongoing community consultation about the SES might help.*

*And it will help if we can make the SES Actions 'SMART'!*

## INTRODUCTION

The Port Phillip Alliance for Sustainability (PPAS) is a community group committed to understanding and commenting on key environmental issues facing the City of Port Phillip. It was formed in 2014 but its members have been climate change activists since the 2000's.

The City of Port Phillip was one of the first municipalities to see climate change as a major challenge. It was especially concerned about predictions of riverine flooding and sea level rise particularly affecting our City, and consequently developed two major policies:

- Towards Zero in 2007 – focussed primarily on emissions reductions; and
- Towards a Water Sensitive City in 2010.

These policies called for both Council and community action, and proposed annual reports on progress toward targets to be achieved by 2020 - with a commitment to a review in 2015. However, the review never happened, so the policies of 2007 and 2010 have stood unchanged until recently, with the Sustainability Department responsible for delivering both Council and community outcomes.

And those outcomes have been disappointing, due to:

- Difficulty motivating the community given the obstructionism of our national government;
- Failure to effectively embed actions across Council operations;
- Lack of engagement by some Councillors;
- Lack of environmental champions at senior staff levels;
- Ongoing inadequacy of budgetary allocations;
- The complexities of action and advocacy beyond our municipal boundaries.

This is not good enough. Our local community is seriously exposed to climate change - and rising sea levels in particular. Our long term safety and amenity, and that of our children, is under threat. We expect Council to be a leader and our leading advocate - as regards both reducing greenhouse emissions and implementing adaptation strategies. We expect that greenhouse and climate targets will be taken seriously and that adequate resources will be provided to achieve them. Yet we have heard of the targets set in 2007 and 2010 being dismissed, in some quarters, as merely “aspirational”.

Fortunately, Council's record has improved somewhat in the current term. We welcome:

- Its prompt commitment to the Melbourne Renewable Energy Project (MREP), which promises to be transformative for CoPP and to provide the impetus for decisive responses to other challenges ahead;
- The signing by Council of the Elwood- Elster Creek MOU as a basis of collaboration with partners to address the flooding threat and water pollution;
- The launch - earlier this year - of the Sustainable City Community Action Plan (SCCAP),
- The launch of this draft Sustainable Environment Strategy (SES) which sets a comprehensive sustainability agenda for CoPP over the next ten years – with realistic cost estimates.

The SCCAP and the SES have great potential. However, much will depend on avoidance of the mistakes of the past decade. Our comments below are meant to be constructively critical, while giving credit where we think it is due.

## REGARDING A GREENER, COOLER, MORE LIVEABLE CITY

### CANOPY COVER

**Action 1** promises “ongoing investment in species diversification, park trees, streetscape improvements ... biodiversity and climate tolerant species selection.”

As an inner urban municipality, the CoPP suffers the ‘heat island effect’. Increasing temperatures in urban areas are compounded by urban densification and reduction of tree canopy coverage. The CoPP includes some areas which are already relatively well treed (eg Elwood) but other areas which are particularly poorly treed.

Fortunately, there is now growing interest in blue-green infrastructure. Waterways covered and concreted last century are being restored and celebrated, and treed open spaces are being expanded and linked with a view to – in the words of **Action 26** – “protect[ing] against flooding and enhance[ing] the natural environment.’

And, of course, to provide shade. The Greening Port Phillip Strategy and Street Tree Planting Program were adopted in 2017, and the draft SES sets a target (at page 35) of a 21% canopy cover by 2028, with a 2015/16 baseline of 19% and (at page 36) targets of 11.2% for 2021/22 and 12.1% on private land for 2027/28 – on a baseline of 11%.

However, these 10-year targets seem unambitious when compared with the City of Melbourne’s 20-year target of 40% canopy cover in public spaces by 2040 - almost double their baseline level of 22%. To achieve this, CoM continually reviews its choice of species – recognizing that climate change is reducing moisture in the soil and making some species unviable, and having regard also for time to maturity, longevity and extent of canopy cover, and the ‘hard engineering’ of street design.

Unfortunately - judging from the poor health and small canopy size of some current plantings – policy and practice in CoPP seems to be rather less professional. Nor does there appear to be much attention in CoPP to the issue of how to increase soil health, and its moisture-capture and moisture-holding capacity - thus improving the chances of tree survival.

PPAS has repeatedly raised the question of surface permeability – which is important not only for the survival of trees but also for stormwater harvesting, pollution reduction and flood mitigation. However, Council persists with an active program of concreting laneways and kerbing, and evinces very little practical commitment to permeable paving, and other measures, to improve the passive watering of trees.

Practices in asset management need to change to give priority to permeability and soil and plant health. The moratorium on laneway renewal in Elwood should be immediately extended to the rest of the city. And there must be fit for purpose use of recycled water based on an updated Water Balance analysis.

### ENERGY EFFICIENT BUILDINGS AND ENVIRONMENTALLY SUSTAINABLE DESIGN

**Action 5** is to “[e]ncourage and enforce sustainable, climate resilient buildings through the planning process by applying environmentally sustainable design planning policy guidelines and by providing clear, accessible information to the community.” However, developer compliance with Environmentally Sustainable Development (ESD) requirements is generally patchy across the country, and presumably no better in CoPP. According to the Victorian

Building Authority's Building Permit Audit Report of September 2014, only 63% of developments were compliant. And, considering that the auditors did no actual site inspections, we suspect that actual compliance is much less.

#### 2.1 Overall compliance

Of the permit files audited at council, on average 63% of the items assessed in each file were found to be compliant (documentation and technical content). There was not enough evidence to make a determination on compliance for 29% of items (information missing), and 8% of items were not compliant with the legislative framework.

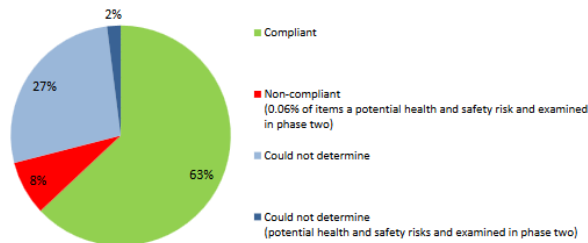


Figure 1: Phase one – overall compliance ratings of applicable items

*Extract from Building Permit Audit, September 2014 (Victorian Building Authority)*

And scepticism about the effectiveness of energy efficiency and ESD regulations is further reinforced by Pitt and Sherry's National Energy Efficient Building Project report to State and Commonwealth Governments in November 2014, which documented widespread concern about non-implementation of energy performance requirements of Building Codes (page viii). Many stakeholders told them Australia was falling far short of best practice.

We need regulations to ensure:

- That short term capital limitations do not compromise long term economic and environmental performance in our buildings;
- That heat island effect is considered at the design stage of all developments;
- That all planning requirements specifically address rising sea level predictions;
- That:
  - all buildings are inspected by an independent ESD expert who will report on compliance with ESD requirements; and
  - any shortfalls are made good through the fines to cover the costs of the shortfalls, these being paid into a Port Phillip Energy Fund; and
  - the Port Phillip Energy Fund is used to support ESD measures in other areas - especially low income and renters – thus ensuring that overall ESD targets are met.

## REGARDING A CITY WITH LOWER CARBON EMISSIONS

### COUNCIL EMISSIONS

The Melbourne Renewable Energy Project (MREP) will abate 87% of Council's emissions. It is important, however – for exemplary, economic and environmental reasons - that Council continues to improve energy efficiency and energy harvesting on its buildings.

We welcome that Council has given priority to this matter as **Action 6**, but note that targets are yet to be developed across the 10 year period. We presume that these will be provided



in the Climate Adaptation and Greenhouse Action Plan. Council should report its gross direct greenhouse emissions, regardless of purchased offsets. And there should be annual reduction targets written down to the level of specific buildings.

Council has set an energy use target of 7,360 MWh for its own buildings by 2030 – down from 8,900 MWh in 2016/17. This represents only a 17% reduction. We believe that Council should be more ambitious. A reduction of at least 50% by 2027/28 is feasible, and would save money. And energy harvesting on council facilities will help. While Council currently has 293 kW of solar PV, it owns or controls more than 100 buildings which offer scope for much more of the same. Council should set a target of at least 1,500 kW of solar PV by 2028, the increase being proportionate to the increase in the community target.

Furthermore, Council should not hide its light under a bushel. If it puts solar panels on a building, there should be a sign telling the public know that it is running on renewables. If waste or water is recycled, there should be a video or infographics explaining the cycle. Along with explanations of the relevance of these measures to addressing climate change.

## COMMUNITY EMISSIONS

We welcome the commitment to set - some time this year - Sustainable City Community Action Plan (SCCAP) targets for 2025. We hope to see annual progress reports.

Council targets should be based on the science – not the targets governments may set. The Climate Change Authority recommended, in August 2016, that to meet its Paris climate commitments based on a 2% target, Australia required emission reductions of between 45% and 63% of 2005 levels by 2030. The desired limit of 1.5 degrees, however, calls for greater reductions. So a community target of at least 63% by 2030 is indicated.

We welcome Council's baseline estimates of community greenhouse gas emissions – the inevitable uncertainty about them notwithstanding. We would welcome an opportunity to understand and review the methodology of the consultants, and hope that Council will make this available. We are particularly interested in energy-related emissions from gas and electricity, which should be relatively easy to estimate using data held by distribution networks. Council should ask the State Government to require the regular release of metered energy data by municipal area.

PPAS also welcomes the various proposed initiatives to reduce community greenhouse emissions – **Actions 13 to 19**. We wonder, however, having regard to competing demands and past performance, if targets will be achieved. **Action 15** - creating a community funded offsite renewable energy project – should help to move things along. While it will be of particular interest to apartment dwellers, other residents will also participate.

We particularly welcome **Action 13** - a program for supporting low income households to access solar. We suggest that it should be implemented as soon as possible in this Council term and become ongoing. Solar PV might be paid for by a levy on rates set at less than the estimated savings on power bills. And see also our suggestion above to support energy efficiency and ESD for low-income households from a 'Port Phillip Energy Fund' holding fines paid by developers for non-compliance with energy efficiency and ESD requirements.

## REGARDING A CITY ADAPTIVE AND RESILIENT TO CLIMATE CHANGE

Given Council's failure to achieve past targets, we particularly welcome its interest in creating an energy foundation - **Action 22**.

We do not say this by way of questioning the competence and commitment of Council and its officers. Rather, it is a 'horses for courses' argument. We require for effective community engagement and motivational leadership an organisation conceived and dedicated somewhat differently from the bureaucracy of local government – an organization that is ultimately answerable to local government but rather more nimble.

Energy foundations have considerable advantages. They maintain focus; attract state and federal funding; are better at community contact and engagement; and have the necessary flexibility to develop and deliver programs on time and on target.

Further to the above - we need our own 'Port Phillip Energy Foundation' adapted to our own requirements. We should not try to tag on to a body already created to serve another Council's requirements.

However, while we would have the PPEF now if we could, we accept that not everybody is as convinced of its merits as we are, and that some time may be required to think about ways and means. So we propose that Council should:

- Monitor progress and decide whether a PPAS could do better;
- Review the foundations created by other Councils and develop a model for CoPP;
- Make a decision early in the next term (2021);
- Task our new PPEF – if established - both to reduce emissions and to promote adaptation, giving priority to:
  - Energy upgrades to low income and vulnerable households;
  - Solar purchasing initiatives across domestic and commercial sectors; and
  - Energy upgrades for households - especially rented apartments - and commercial operations - especially small businesses.

## THE ECOCENTRE

CoPP is proud of its Ecocentre – a valuable instrument of community engagement and environmental action and advocacy. And PPAS glad to see **Action 21** – a commitment to a considerable investment in its redevelopment.

Unfortunately, however, budget projections suggest a somewhat faltering commitment. The redevelopment has been deferred by at least a year, and the \$200,000 allocated for 2017/2018 for preliminary planning and costing has not been spent – and is now not scheduled to be spent until 2019/2020.

We urge Council to commit to spending the \$200,000 in 2018/2019, and to get back to the original schedule to complete the redevelopment by 2022.

## THE HAZARDS OF CLIMATE CHANGE

The draft SES recognises the need to prepare for a future of heatwaves, drought, storm surges and flooding. We sense, however – despite the dire predictions of substantial inundation in our city by 2100 - a persistent underemphasis on flooding as a major threat to us in the medium to long term. We call upon Council to take a more prominent role:

- Lobbying State Government for a whole-of-Government approach to coastal defences against sea level rise, and developing strategies to reduce its impact, especially during storms;
- Informing and educating residents of the hazards that they face from climate impacts - particularly rising sea levels; and
- Ensuring that planning requirements factor in the impacts of sea level rise and that these are complied with; (See our comments above re **Action 5**)
- Promoting local neighbourhood action plans to improve public understanding of the flood risk in particular places, and to teach people what to do in an emergency.

## REGARDING A WATER SENSITIVE CITY

### GENERAL

The 2010 Water Plan – ‘Towards a Water Sensitive City’ - was based on substantial investigation and had three key targets:

- reducing the use of potable water;
- increasing the use of recycled water for open space watering; and
- reducing polluted water entering Port Phillip Bay.

The Plan set water management targets to be achieved by 2020 and enunciated best practice strategies. It looked at ways to increase the use of water sensitive urban design (WSUD) to capture and reuse water and improve storm-water management. However:

- It did not sufficiently address the impact of floods as well as drought;
- It did not have an implementation strategy; and
- It lacked an adequate financial commitment.

It is hardly surprising, therefore, that Port Phillip has since developed water projects in an ad-hoc and opportunistic fashion, without any overarching framework in which priorities can be realistically established. Action on WSUD targets has stalled. Reporting on the targets in the Water Plan of 2010 has gradually eroded. And it is impossible to reconcile regular Towards Zero reporting with other reporting material being produced by Council.

Furthermore, there has been, since 2014, only one relevant major project:- stormwater harvesting in Albert Park - a project owned and operated by three different parties (CoPP, CoM and Parks Victoria) all with different - and, in some cases, conflicting - expectations. And CoPP has compounded its problems by proposing to transfer stormwater across catchments - from Shakespeare Grove Main Drain to Albert Park Lake - which will both require a lot of energy and exacerbate flooding issues for CoM. Yet this project – somewhat remote from our area of greatest threat - is now Council’s main hope for meeting its 2028 recycling and pollution-reduction targets.

What is required is a general strategy based on the philosophy called Integrated Water Management (IWM) - an approach which emphasizes the need to deal with water events within their own catchments – what is called a Place Based Response – which recognises:

- The relationships between water consumption, rainwater, stormwater, water retention, waste water, water pollution and flood mitigation; and
- The need for upstream management of rainfall - by developing flood basins, expanding wetlands, increasing surface permeability – to prevent or reduce downstream flooding;
- The wisdom of passive absorption, cleaning and use of rainfall - using “the city as a sponge”.

The extensive studies already carried out must be used to develop an integrated city wide IWM action plan embracing not only Fishermans Bend and Elwood but other flood prone areas of CoPP. The plan must establish key principles for water management in accordance with the concept of the city as a sponge. Also, Council must enforce IWM measures on private land which mirror the measures taken on public land.

Council is already effectively committed to an IWM framework in respect of the Elster Creek Action Plan. Bayside Council’s decision on Elsternwick Park presents opportunities for flood mitigation, stormwater harvesting and pollution reduction - amongst other benefits.

However, the draft SES does not provide a comprehensive IWM framework. Virtually all the Actions under the heading ‘A Water Sensitive City’ are presented as projects to be conducted in isolation. To be effective they need to be sequenced and connected as steps and stages in a total strategy – as components of an ‘overarching framework’.

The notion of such an ‘overarching framework’ - to “Develop a Water Sensitive City Plan to drive an integrated approach to water conservation and management” – is mentioned in the SES, but as just one of the ten water-related Actions – **Action 37** – rather than as the strategy governing all the other Actions.

Again, the only two measures of progress for water management are:

- Reduction in demand for mains water
- Removal of pollutants. (at page 29)

whereas a broader perspective of what is involved would suggest other measures - for example:

- Protection and enrichment of biodiversity
- Development of alternative water sources
- Recycling of water for public use; and
- Flood prevention and mitigation.

## FLOOD PREVENTION AND MITIGATION

The 2010 Water Plan included (at page 43) the comment that

Climate change will increase the duration, intensity and frequency of storm events. It is estimated that storm intensity for a 20-yr event is likely to increase by 5-10% by 2020, 35-45% by 2050, and 70-100% by 2100.

But, even so, the 2010 Water Plan was deficient as regards flood management. Although ground-breaking work had been done in 2007 by the CoPP and the CSIRO on the impact of sea level rise and the particular vulnerability of many areas in CoPP, nine years of drought

had created a false sense of security. The Plan said very little about reducing peak flood levels and household vulnerability.

It took the floods of 2011 to stimulate more research into our flood risk:- research by RMIT; by the Water Sensitive Cities CRC at Monash; by DELFT (Netherlands Water and Flooding Research Institute) working with the CRC; by GHD; by the MAV; and by CSIRO - which has developed flood modelling and engineering solutions tools. And significant material has also been generated by highly regarded consultancies such as ARUP and Aecom in connection with the Fishermans Bend urban renewal process.

Again, there is considerable guidance to be got from the “Melbourne Water Flood Management Strategy – Port Phillip and Westernport 2015” - which:

- Tells the history of flooding in the region and records that in 2011 150 mm of rain fell in 14 hours – causing the flooding of over 1300 homes;
- Enunciates a vision:
  - Together we are aware, responsive and resilient.
  - Communities, business and government understand flooding, plan for challenges and take action to manage risks;
- Refers to the findings of the CRC research in 2015 related to Elwood and Elsternwick Park - data now available to establish a baseline for comparing floods and reviewing progress.
- Builds on years of flood management experience, to improve how we manage and reduce flood risks across Port Phillip and to guide Council;
- Mentions many different ways to reduce and manage flood risks:- education, urban planning, insurance, flood warning systems and structural measures.
- Calls for flood risk management programs to be focusing on highest priority areas first, and aims to reduce impacts and get the best social, economic and environmental outcomes;
- Establishes a KPI of a 20% reduction in flood effects by 2021;
- Proposes that flood risk be assessed with regard to both likelihood and consequences - rating risks as ‘extreme’, ‘high’ or ‘medium’;
- Calls for a reduction in ‘intolerable’ flooding, through drainage upgrades, warnings, and education programs;
- Claims that Melbourne Water has reduced intolerable risks by 10% over each of its previous five-year financial planning periods.

These rich resources of data and expert advice must be integrated into a whole-of-city Water and Flood Management Plan for 2019-2028 covering our flood-prone areas from Elwood to Fishermans Bend - this integration being guided by the abovementioned Integrated Water Management (IWM) philosophy. Specific targets need to be developed relating to flood mitigation including reducing coastal vulnerability. We welcome **Action 25** – to “Assess recommendations from the Coastal Hazard Vulnerability Assessment and develop an implementation strategy to help protect the City of Port Philip against sea level rise and inundation.” We hope it will enable us to firm up predictions of sea level rise and facilitate accurate mapping of future flood hazard - that being an essential prerequisite to intelligent and informed planning of flooding response measures.

A good beginning has been made in Council’s commitment to the Elster Creek Action Plan, and its offer of tangible support to Bayside Council in redeveloping the golf course of Elsternwick Park North into an urban forest and seeking opportunities for further flood mitigation, storm water harvesting and pollution reduction to reduce peak flood levels - possibly by as much as 10%. Council deserves credit for commencing the Elwood CRC study, Flood Management Plans and planning scheme amendments, and especially for supporting the formation of the Elster Creek Forum and negotiating the Collaboration MOU with three other Councils and Melbourne Water. The opportunity now exists, under the

auspices of that MOU, to adopt, model and deliver flood management solutions which will demonstrate the benefits of WSUD. It is to be hoped that Melbourne Water will implement joint flood management solutions in consultation with CoPP and the Elwood community.

Elwood residents are active and aware regarding the dangers and looking to Council to do more about them. That is why, presumably, a moratorium has been put upon the concreting of laneways in Elwood.

PPAS has repeatedly raised the question of permeability, urging its importance not only for flood mitigation but also for stormwater harvesting and pollution reduction. So we hope to see an early extension of that moratorium across the whole of CoPP. Indeed, Council has obviously not erred on account of ignorance. Its 2010 Water Plan said (at page 43) that:

With an estimated 61% of the municipality impervious, this will increase in peak flood flows, impacting on the ability of drainage infrastructure to deal with ... intense rainfall, resulting in increased stormwater runoff and flooding.

And CoPP has, more recently, provided advice to the Fishermans Bend Panel from Cloudburst consultants, emphasizing, again, the importance of permeability. We simply need to practice what we preach.

Again, the forthcoming Marine and Coastal Bill may enable long term changes in the Port Phillip Planning Scheme as well as providing an opportunity to develop greater community awareness of the impact of climate change on key localities in the City. Residents - especially potential new residents - must be alerted to the risks in flood prone areas.

## WATER BALANCE

The last comprehensive Water Balance analysis done for CoPP was by EDAW in 2009. It analysed water flows and pollution by sub-catchment. We understand there is some new work, but that it relates only to reducing pollution levels in Albert Park Lake and Alma Park.

We need a new water balance analysis which establishes the extent of water pollution and updates flow data on the 15 catchments within CoPP or contributing water to CoPP. Such information would provide a basis for solving the water problems facing CoPP and for establishing priorities. Previous analysis has already demonstrated the significance of Elster Creek, and of main sewer lines in Fishermans Bend.

## WATER POLLUTION / STORMWATER QUALITY

It is important that Council should maintain and pursue the 2066 target for best practice reduction of water pollution. We will never achieve it, however, while relying upon in-street WSUD alone. Hopefully, the current review will reveal ways that the target can be met.

With respect to stormwater quality and actions to mitigate respective contamination levels (Total Suspended Solids (TSS), Total Nitrogen (TN) and Total Phosphorus (TP)), the information presented to the community should be transparent and reflect complete data with details surrounding methodology and data capture where changes have been made. Relevant examples include:

- Figures representing pollutant reduction load should state that they are cumulative figures; The 2016/17 Baseline figure of 71,369 kg/annum of Total Suspended Solids (TSS) relates to a

decrease on baseline of 10%. The figure is convoluting as the baseline is not indicated in the draft SES and is allegedly originating from either 2007 or 2010, as per *the CoPP Toward Zero Annual Progress Reports* or *CoPP Water Plan*. This figure should be clarified - with any change to methodology detailed. This also applies for TN and TP figures in the draft SES.

- Understanding that there has been a change to the methodology regarding the capture of stormwater pollution reduction projects and achievements made post the baseline year until now, such information should be clearly detailed in the draft SES. This will avoid any confusion when referring to information and data provided in existing *CoPP Toward Zero Annual Progress Reports* which specify alternative figures. The CoPP should explain the rationale and provide further information as to the basis for adjusted figures indicated in the draft SES.
- In principle, the CoPP should adhere to audit and assurance standards, as well as, Environmental Management System formalities regarding data transparency, comparability, accuracy and completeness - particularly when reporting data, providing background as to the reality of a situation and/or justifying a change in methodology.

While the commitments seem promising, we can see multiple shortfalls and areas for concern. These include:

- That outcomes may still fall short of the targets previously proposed in the *CoPP Integrated Water Management Strategy Report* which explored 'Reasonable and Achievable', 'Aspirational' and 'Business as Usual' scenarios;
- That, given current information detailing objectives up to 2028, and referring to the *Urban Stormwater - Best-Practice Environmental Management Guidelines 1999* (BPEMG) endorsed by State and Local Government, it appears unlikely that Council will achieve an 80% TSS reduction of the typical urban annual load by 2066 – as that would exceed previous modelling figures and various scenarios both aspirational and business as usual;
- A large portion of the pollution reduction anticipated by 2027/28 relies heavily upon the Albert Park Stormwater Harvesting Project which poses significant risk and drawdown on the CoPP's budget allocated towards this 'Action' – 'A Water Sensitive City' (\$27.7 million).
- We anticipate and urge that 'place based' WSUD solutions should be integrated within CoPP to ameliorate the risk which the Albert Park Stormwater Harvesting Project poses, and that there should also be an alternative and compounding solution to address such targets. We need a feasibility and risk assessment, considering all measures to achieve such targets.
- The strategy itself does not address any gross target Council is aiming to achieve, particularly beyond 2027/28 or towards the alignment of holistic TSS reduction targets. How is Council tracking from a bigger picture? Where is or will Council be ultimately heading? What is the vision in terms of what Council wants to achieve?
- Commitment to achieve the 80% TSS reduction target by 2066 has only been expressed verbally. It should be stated in the SES.
- We are thankful to have been privy to Council information regarding CoPP's draft Pollution Balance Calculations. We note, however, that BPEMG guidelines may have been incorrectly referenced within the document and in calculations regarding Total Phosphorus (TP). The BPEMG states that the current best practice performance objective for TP is '45% retention of the typical urban annual load' (see Figure below [ref. Table 2.1 of BPEMG CSIRO, 1999]). We note that CoPP has utilised a 60% target as opposed to 45% when undertaking respective calculations. The CoPP should rectify such calculations or justify not doing so.

<b>Pollutant</b>	<b>Receiving water objective:</b>	<b>Current best practice performance objective:</b>
<b>Post construction phase:</b>		
Suspended solids (SS)	comply with SEPP (e.g. not exceed the 90th percentile of 80 mg/L) (1)	80% retention of the typical urban annual load
Total phosphorus (TP)	comply with SEPP (e.g. base flow concentration not to exceed 0.08 mg/L) (2)	45% retention of the typical urban annual load
Total nitrogen (TN)	comply with SEPP (e.g. base flow concentration not to exceed 0.9 mg/L) (2)	45% retention of the typical urban annual load
Litter	comply with SEPP (e.g. No litter in waterways) (1)	70% reduction of typical urban annual load (3)
Flows	Maintain flows at pre-urbanisation levels	Maintain discharges for the 1.5 year ARI at pre-development levels
<b>Construction phase:</b>		
Suspended solids	comply with SEPP	Effective treatment of 90% of daily run-off events (e.g. <4 months ARI). Effective treatment equates to a 50%ile SS concentration of 50 mg/L.
Litter	comply with SEPP (e.g. No litter in waterways) (1)	Prevent litter from entering the stormwater system.
Other pollutants	comply with SEPP	Limit the application, generation and migration of toxic substances to the maximum extent practicable
<p>1 An example using SEPP (Waters of Victoria 1988), general surface waters segment.  2 SEPP Schedule F7—Yarra Catchment—urban waterways for the Yarra River main stream.  3 Litter is defined as anthropogenic material larger than five millimetres.</p>		

**Table 2.1 Objectives for environmental management of stormwater.**

- We would appreciate if the final version of the CoPP’s Pollution Balance Calculations were made public as promised – to facilitate more informed feedback and consideration;
- There is no clear and articulate commitment specified within the Action items in the draft SES as to how the percentage reduction targets in the 2020s - or beyond to 2066 - will be achieved. We recommend that Specific, Measurable, Achievable, Realistic and Time bound (SMART) targets should be established for each Action. All we have in the draft SES at present are loose unbinding commitments.
- The 1999 BPEMG guidelines – as well as addressing stormwater quality and pollution reduction objectives - also refer to ‘maintain[ing] discharges for the 1.5 year ARI at pre-development levels’. This has not been adequately addressed in the draft SES as regards performance management and reporting (although Actions 29, 31, 35 and 36 indirectly refer).
- In order to provide a ‘Water Sensitive City’ and ameliorate flood risk, Council must monitor and report the number of developments - particularly new ones - that adhere to the best practice performance objective, particularly in flood prone areas. As development goes ahead, permeable surfaces are reduced, increasing demand on drainage networks by stormwater runoff and thus causing flooding.
- Measures should be put in place to mitigate such risk using the BPEMG performance objective as a reporting metric. This may be undertaken by working collaboratively with planning, drainage and/or civil works departments within Council to obtain and record such data. For example, for new developments, where a planning permit is required, the applicant/developer should be required to submit respective WSUD measures, drainage plans and calculations for approval and endorsement by Council, and report against ARI pre- and post-development levels. Such information can then be used to gauge CoPP’s BPEMG performance.



## MORE FEEDBACK?

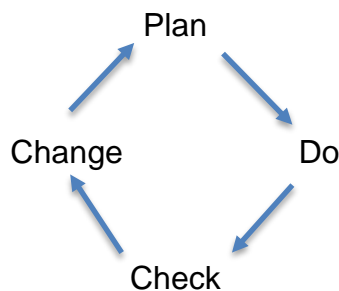
Full and transparent information and communication will generate better community understanding and support. How about providing more opportunity for feedback regarding this SES? Perhaps a Council SES Consideration Panel where submissions can be lodged as public documents and the submitters given the opportunity to address either an extended Council meeting or a panel of Councillors, Officers and experts.

## IMPLEMENTATION

We remain to be convinced – pursuant to the substantial failure of the Towards Zero project - that there will be adequate **resourcing, monitoring and reporting** to ensure comprehensive and effective implementation of SES Actions.

As regards **resourcing**, we are pleased to see substantial forward estimates – at pages 37-39 – of what implementation will cost. We realise, however, that they are for a ten-year period. The test of Council's commitment to this Strategy will be in the budgeting. In particular, will the budget reflect a realistic prediction of contingencies attributable to climate change? - eg: more flooding; more power failures; higher insurance premiums.

As regards **monitoring and reporting**, the Mayor writes that CoPP aims “to be a city that learns from our success and strives to do better”. So we need to follow the learning cycle:



**Reporting** needs to be built into this cycle so the community is aware of the results of actions; what changes will occur; and how the plan and timeline now looks.

And we need to clarify the nature of goals, strategies, objectives and tactics – because the SES mixes them up somewhat:

- A **goal** is a broad outcome.
- A **strategy** is the approach you take to achieve a goal.
- An **objective** is a measurable step you take to achieve a strategy.
- A **tactic** is a tool you use in pursuing an objective.

A goal needs to be SMART – that is - Specific, Measurable, Achievable, Relevant and Time-bound. So “Cooler, greener, more liveable city” is not satisfactory as a goal. And the 45 Actions in the SES are not SMART – rather, good and well-intended tactics in search of an objective. While specific and timebound, they are mostly not sequenced and not measurable. They need to be presented as a sequence of steps to be implemented, then measured and reported. Unless this is done, we run the risk that the SES, like *Towards Zero*, will degenerate into another aspirational sermon.

**SUBMITTED ON BEHALF OF PPAS ON 17 MAY 2018**