

**Climate Change Adaptation
Good Practice - Case Study**

Mornington Peninsula Shire Council's community engagement programs



About Adaptation Good Practice

Adapting to climate change is a relatively new concept to many. It is important to learn from practitioners who are undertaking adaptation activities that are beginning to have tangible outcomes. Documenting examples of good practice and identifying the criteria that makes them work, enables those interested in adaptation to learn about how to take action.

There are expectations that Adaptation Good Practice (AGP) includes a definite start and finish to a project. However climate change practitioners' experiences show that adaptation projects are often steps in longer learning journeys. There are no golden rules on how to adapt and often practitioners across Australia are inventing the wheel that drives future AGP. This case study of Mornington Peninsula Shire Council's community engagement programs is part of a

series of 16 case studies that recognise exemplars for AGP in Australia. Through the development of these stories of successful adaptation it was refreshing to see an emergence of similar experiences and challenges regardless of the project or location. A synthesis of these stories can be seen in the Synthesis Report 'Climate Change Adaptation Good Practice: Key lessons from practitioners experiences', which will help practitioners to understand that they are not alone in their challenges and to see some of the clear lessons learned about what drives good practice in adaptation.

Following the Snapshot there is a more in depth narrative of the experiences, learnings and network links to stimulate further engagements and knowledge sharing among the growing community of adaptation practitioners.

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Case study snapshot

Mornington Peninsula Shire Council's community engagement programs

Mornington Peninsula Shire Council ('the Shire') is situated on a boot-shaped promontory separating Port Phillip and Western Port Bays and is vulnerable to coastal hazards and other extreme weather events including drought, bushfires and heatwaves exacerbated by climate change.

Committing \$30 million to develop and implement an Integrated Drainage Strategy focused on managing increased rain intensity and sea level rise; doubling its Fire Management budget; achieving a 60% reduction in potable water use; and active participation in the Federal Government's Coastal Adaptation Pathways Project are the latest steps in the Shire's journey to responding to the risks and opportunities associated with climate change.

The project journey

Over the past decade Mornington Peninsula Shire Council has been preparing for the potential impacts of climate change. Community engagement has underpinned its approach to building resilience. The journey began with the Sustainable Peninsula Initiative developed in conjunction with the community in 2001.

The *Shire's Sustainable Peninsula Initiative* in 2001 provided a framework and key drivers for community action on adaptation to reduce vulnerability to the potential effects of a changing climate, in tandem with actions to mitigate greenhouse gas emissions. Early actions included addressing issues such as water and energy efficiency, renewable energy, land sustainability and protection of the Greenwedge.

In 2006 the Shire commenced a serious discussion with the community

about Climate Change at a forum *Your Community Your Future*. Then in 2008 Council commenced a series of climate change 'Conversations' with the community, which informed its action plans

Prior to launching the 'Community Conversations' in 2008, Council produced an information kit titled "Climate Change: what are we doing about it". It presented scientific evidence from a study of the climate change impacts on the Western Port Region, which Council undertook with the South East Councils Climate Change Alliance (SECCCA) and CSIRO. This study gave good "street credibility" to the Conversations. This communication and engagement process also worked well because it 'hooked' the community at precisely the right time when interest and concern about climate change impacts was at a peak. Council put a lot of energy into making the Conversations attractive, which paid off.

The Conversations motivated residents and local community groups to contribute to the Shire's climate change adaptation agenda. The latest stage of the community engagement journey includes behaviour change programs based on resolving barriers identified by residents who attended the 'Conversations' as well as other actions around managing key climate change risks.

Moving forward, Council is incorporating these key lessons:

- Leverage community involvement within 6 months of all further Conversations. Be prepared to move quickly to enable the momentum generated at community meetings to be maintained.



Figure 1: Map showing Mornington Peninsula Shire almost surrounded by the sea, with a coastal boundary of over 190 kilometres.



This study gave good “street credibility” to the Conversations. This communication and engagement process also worked well because it ‘hooked’ the community at precisely the right time when interest and concern about climate change impacts was at a peak.

- Firmly encourage the community to undertake their own adaptation actions in homes, schools, businesses and other organisations, rather than let Council be the main instigator. This would involve taking on enabling and catalytic roles (similar to Landcare and Coastcare coordinators)
- The majority of participants in the Conversations have been in the over 50s cohort. Embrace social media to attract a younger cohort, with a sharper focus on empowering social networks to initiate their preferred actions.

Drivers for adaptation action

In 2006, following strong leadership from the Council and Chief Executive Officer (CEO) the Shire had its first serious discussion with the community about climate change.

→ Adaptation action

Mornington Peninsula Shire Council is an exemplar of successfully engaging its community in adaptation actions. In contrast, many councils across Australia have reported that their greatest challenge is engaging their communities and managing their expectations.

Risks and impacts addressed

- Average annual temperatures will increase by up to 1.3 degrees in 2030 and 3.5 degrees in 2070
- Increasing frequency and severity of intense rainfall events, heat waves, droughts and bushfires
- Sea level could rise up to 170 mm by 2030 and 490 mm in 2070, putting coastal communities and infrastructure at risk of inundation and flooding.

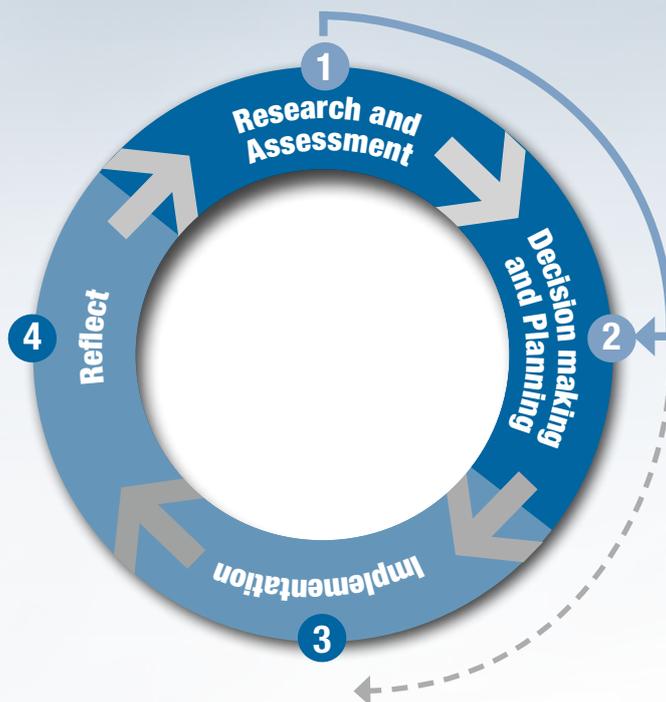


Figure 2: Mornington Peninsula Shire Council's Adaptation Good Practice phase

Outcomes achieved

- Tailored communication strategies and engagement activities that are socially inclusive
- Community action around climate change mitigation and adaptation
- Climate Change adaptation opportunities built into Council processes
- Adaptation actions on the ground.

Emerging outcomes

Community engagement strategies and actions are continually reviewed to reflect emerging successful understanding of climate change.

The project

In 2006 the Shire had its first serious discussion with the community about climate change; it was the key topic in the **Your Community Your Future Forum**. Following on, the Shire implemented a climate change engagement program, broken into three stages:

Stage 1 – Climate change research, 2006-2008. The Shire worked through SECCCA to obtain an integrated assessment of the likely impacts of climate change over the next fifty years. The work resulted in a milestone report launched in 2008 - *Impacts of Climate Change on Human Settlements in the Western Port Region: People, Property and Places*.

Stage 2 - Climate change conversations, 2008. Twelve community forums were held across the Peninsula focused on informing residents of key outcomes from CSIRO's integrated assessment. Over 3,000 participants discussed their concerns and identified their barriers to behaviour change.

Stage 3 - Continuing the climate change conversation, 2008 - onwards. This stage of the project includes behaviour change programs based on the barriers identified by residents who attended the 'Conversations' as well as action around managing key climate change risks.

Risks and impacts addressed

The Shire has identified the following risks and sectoral impacts on coastal and rural communities, human health, primary industries and emergency management.

The Shire has integrated these climate change risks into its Corporate Risk Register, then undertakes initiatives to manage the risks including

Over 3,000 participants discussed their concerns and identified their barriers to behaviour change.

the development of a number of implementation strategies in conjunction with active participation in State and National Programs to ensure the community is prepared for the potential impacts of climate change.

Temperature increase, heat waves and bushfire

- Average annual temperatures will increase by up to 1.3 degrees in 2030 and 3.5 degrees in 2070. Higher temperatures place greater stress on elderly residents and those living in older homes with inadequate insulation.
- Heat waves are especially dangerous for the elderly or disabled; and infants
- Increased high fire risk weather, puts ecosystems, life and property at risk.

Intense rainfall and drought

- A warmer atmosphere holds more moisture and alters wind patterns. This is likely to lead to fluctuating periods of decreased rainfall and more intense rainfall events resulting in flash flooding and erosion. Droughts are anticipated to be longer and more severe, with impacts on water supplies for settlements and agriculture.

More frequent and intense storms

- Storms will be more severe and more frequent, damaging assets and infrastructure and placing a greater strain on emergency services.

Sea Level Rise (SLR)

- Sea levels projected to rise by up to 170 mm by 2030 and 490 mm by the year 2070, putting coastal communities and infrastructure at risk of inundation and flooding.

Response strategy

Successful outcomes of the Conversations including getting the community to support response strategies (e.g. to manage floods and coastal hazards), can be adapted and transferred to other local government contexts.

The Shire's response strategies include:

1. *Shaping our Future – one step at a time: the Community Plan, 2008.* The Community Plan identifies "Leading Change on Climate Change" as one of five key goals. To achieve this goal, over a dozen strategies have been identified and articulated within the Mornington Peninsula Shire Strategic Plan, 2009-2013. These strategies flow into Business Unit Plans.
2. Achieving a 60% reduction in potable water use to ensure better preparation for more severe droughts
3. Committing \$30 million to develop and implement an Integrated Drainage Strategy focused on managing increased rain intensity and sea level rise
4. Implementing requirements for planning applications; coastal developments and Coastal Management Plans to identify and respond to sea level rise risks

5. Doubling of the annual fire prevention budget
6. Implementation of a Heatwave Strategy and action plans for vulnerable residents
7. Incorporating Ecological Sustainable Design into new Council buildings, refurbishments and purchases
8. Amending the Planning Scheme to identify areas subject to climate change risks as data becomes available
9. Further enhancing its mitigation activities through the Energy and Greenhouse Management Improvement Plan 2013.

The **Climate Change Community Conversations** (the 'Conversations') were extremely successful and crucial for gaining community commitment to adaptation initiatives.

The Shire's community engagement efforts were recognised in early 2010 when it was awarded the top prize for Sustainability Initiatives at the Local Government Professionals (LGPro) Annual Awards for Excellence for the Climate Change Conversations. In the same year it also won Keep Australia Beautiful's Pam Keating Environmental Innovation award for Continuing the Climate Change Conversations.

Implementation phases

Stages 1 and 2 are described on page 5.

- Ongoing implementations of the 3rd stage of community engagement have included facilitated risk-specific engagements including fire walk and talks (from 2010 onwards) and community forums on drought issues in 2010 and flooding in 2011

- In the future, conversations on the hazards and risks of sea level rise will leverage the Western Port Coastal Vulnerability Study presently being undertaken.

→ Lesson learnt:

Communicating with residents and ratepayers of the Shire is challenging for several reasons, including:

- Climate Change is a subject requiring the communications strategy to be based on factual research and presented in a non-alarmist manner
- More than 35,000 ratepayers do not live permanently within the Shire
- The diversity of hinterland and rural to urban areas and coastal towns requires different communications strategies and messages.

During the 'Conversations' participants were asked to identify their 5 top barriers to behaviour change. Key barriers and concerns identified by residents were: cost (42%); access to grants (23%); information (23%); and lifestyle changes (7%). Their feedback informed the development of the Shire's Stage 3 behaviour change programs.

Community Engagement

The 'Conversations' were a major achievement and averaged 250 attendees compared with around 50 attendees in previous community engagement projects.

The Stage 3 behaviour change program, Continuing the Climate Change Conversation, is based on survey feedback from more than 1,700 participants in the 'Conversations'.

Outcomes achieved

Key outcomes achieved to date include:

1. A series of Group Buy schemes for Solar PV, Solar Hot Water and Rainwater Tanks - over 2000 community members registered interest and approximately 1000 residents made purchases
2. Development of a Green Business Network - over 950 businesses are registered with 50 actively participating
3. Launch of an Eco Living Display Centre, demonstrating best-practice in sustainable building and living principles – over 800 residents and 30 local business were involved with the launch and it presently receives approximately 3,000 visitors annually
4. *Continuing the Climate Change Conversation Newsletter* – sent every two months to over 1,500 residents to provide updates on Shire activities, local sustainability activities/events, and government rebates.

Emerging outcomes

Community engagement strategies and actions are continually reviewed to reflect emerging successful understanding of climate change.

Critical success factors

AGP analysis of the project

Success of this approach has been driven by strong leadership and excellent connectivity between all stakeholders.

This project is strong in:

- Leadership
- Connectivity

Leadership

Leadership from the Divisional Director who chairs the Council's internal cross-functional Climate Change Adaptation Advisory Committee, ensures continued comprehensive and co-ordinated action.

The Shire has also responded to over 30 requests for additional presentations of the 'Conversations' for community groups including Rotary and schools, which have engaged an additional 1,000 residents.

→ Leadership lesson learnt:

Leadership from the Council and CEO has been critical to the Shire's success in consulting and collaborating with the community to develop adaptation responses.

Engagement

Twelve 'Conversations' were tailored to localised impacts, demographics and issues raised by residents in the Peninsula's diverse coastal and rural communities. Local school children opened each session talking about their school's sustainability initiatives.

To encourage participation in the 'Conversations' Council produced a



Climate Change: what are we doing about it, Billboards, Personalised letters and ads

booklet, *Climate Change: what are doing about it*. It summarised research outcomes and was distributed to all residents and ratepayers. Each resident and ratepayer was also sent a personalised letter inviting them to the *Conversations*, which were also advertised in local newspapers, on billboards and on flyers posted in local shopping centres.

Current engagement methods

The Shire's current engagement model includes social media such as Facebook for different events and communication with key groups such as Sustainability Street. It is also presently investigating the use of YouTube and Infographics for communication around its approach to adaptation.

In addition to the *Conversations*, Council's current partnerships with communities include Sustainability Street (an innovative community development program); Best Bites (a sustainability

program for local food businesses), a Collaborative Garden Project with Kankama Disability Services; an Arts Mural Project with Mount Eliza Secondary College and a volunteer program at the Eco Living Centre.

→ Engagement lesson learnt:

One message does not suit all stakeholders.

Connectivity

The Shire has integrated climate change risks into its Corporate Risk Register and has developed appropriate strategies to manage the risks in conjunction with active participation in State and Australian Government programs to ensure the community is prepared for the potential impacts of climate change.

Successful outcomes of the *Conversations* including getting the community to support response strategies

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The Shire is currently partnering with the State Government under the Future Coasts Program to undertake a Local Coastal Vulnerability Assessment for Western Port Bay. This study will give a detailed picture of the impacts of sea level rise and inform action for the future.

The Shire has also been partnering with Melbourne Water to undertake local flood mapping as part of its Integrated Drainage Strategy.

In late 2007, a dedicated team of Shire Officers – the Renewable Resources Team – was established to drive a ‘whole of Council approach’ to climate change and key issues of water, waste and energy conservation.

The Shire is a member of South East Councils Climate Change Alliance (SECCCA)’s network of eight Councils, who co-ordinate regional responses to climate change. The Shire is also an active member of the Association of Bayside Municipalities. The ten Councils of the Association are working together to actively manage and maintain the Port Phillip Bay coast and have undertaken a number of projects around climate change adaptation.

→ Connectivity lesson learnt:

An internal cross-functional Climate Change Adaptation Advisory Committee has been established to ensure integrated and continued delivery of the Council’s climate change agenda.

Sustainability

The Shire’s commitment to meeting intergenerational needs traces back to the *Sustainable Peninsula* initiative in 2001. The *precautionary principle* is a key component of the Sustainability Framework developed to support implementation of the Initiative.

The Shire’s community engagement initiatives exemplify the *subsidiarity principle* emanating from the Rio Earth Summit and Agenda 21.

The Community Conversations and continued commitment leveraged from them resulted in a number of positive outcomes including Council doubling the Fire Management budget and an additional \$30 million committed over 10 years for flood mapping and infrastructure.

→ Sustainability lesson learnt:

Current work in progress demonstrates adaptive management principles. This is shown by the Shire’s community engagement strategies and action plans which are evolving to meet current community needs and knowledge levels, and to reflect emerging scientific understandings of climate change.

Cost

Short-term cost benefit analysis shows savings achieved in water, energy and waste reduction.

In the integrated assessment completed for the Western Port Region by CSIRO in 2008, longer-term costs were identified for a number of impacts including flood damage (p. 95), storm surge inundation (p. 58) and bushfire exposure (p. 116).

Through the SECCCA, the Shire has recently participated in two Coastal Adaptation Decision Pathways (CAP) funded projects for Port Phillip and the Western Port regions. The Western Port project, ‘Deciding for the Coast: implementing effective adaptation options’, shares similar objectives and the same socio-economic assessment methodology, and has produced decision support tools that parallel the outputs of another CAP funded project undertaken by seven coastal councils in the Hunter Valley and Central Coast region of NSW – see the case study of the ‘Decision Support for Coastal Adaptation Action: the Handbook’.

Council prepares ongoing annual budgets addressing risks and adaptation including for Sustainability Street, the Eco Living Centre, Best Bites, Fire Walk and Talks.

→ Cost lesson learnt:

Findings from these research projects will better inform the Shire’s decision-making and future investment in adaptation measures.

Conclusion

Take home messages regarding 'how to do' successful community engagement have been shared with many communities of practice including workshops and conferences convened by Municipal Association of Victoria, SECCCA, and ICLEI-Local Government for Sustainability:

Leadership and commitment:

- Council and CEO involvement is essential
- Up front commitment to the full process is also crucial

Attract people:

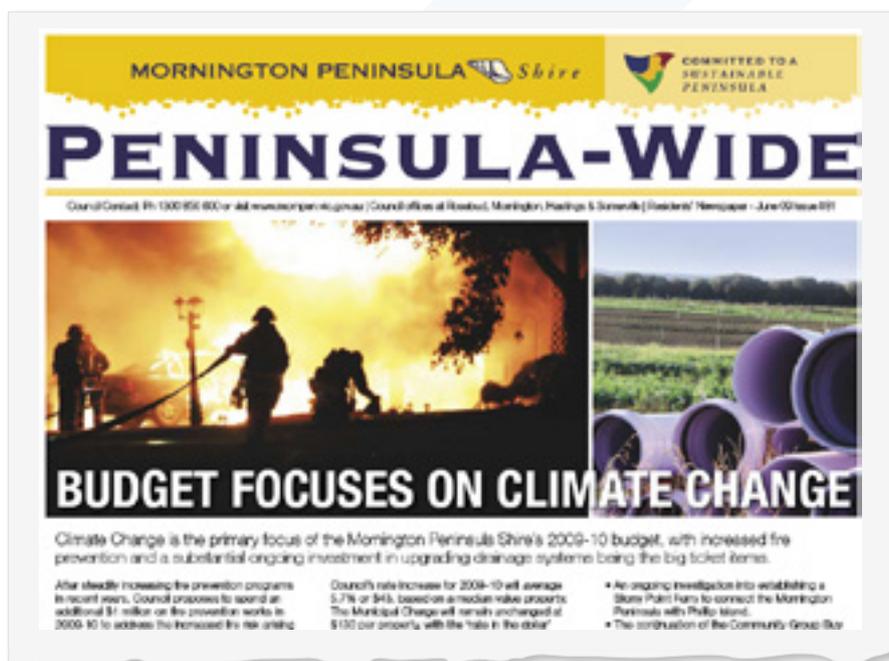
- Track record/reputation/credibility
- Timing – when the issue is 'hot' (and being prepared to say we don't know)
- Extensive communication strategy
- Involve local groups
- Small gifts, rewards and inducements.

The Community Conversations format worked well because:

- It was genuinely interactive, driven by community; questions/issues (Post-Its, computer screen, slides on each item, 'deliberate messiness')
- Presented by 'expert officers' not CEO or Councillors – introductions only)
- Good refreshment provided ('we value you, your input').

Ongoing follow-up is essential:

- Continuing Climate Change Conversations (responding to barriers)
- Walking the talk – we are actively reducing the Shire's carbon footprint and consumables
- Easy access to information.



Budget focuses on Climate Change Climate Change

Gaps and future challenges

Gaps in the preceding CSIRO integrated assessment of Western Port prompted a more detailed coastal vulnerability assessment for Western Port Bay – refer to Connectivity page 7. The Shire is also advocating for a correlating vulnerability study of Port Phillip Bay.

Other information gaps are presently being identified through the development of the Shire's Adaptation Priority Statement.

Links to more information and projects

- Booth, P., and Cox, R.J. (2012) 'Stage 1 Report: Case Studies of Climate Change Adaptation Tools and Application Processes used by Local Government Practitioners'. Australian Climate Change Adaptation Research Network for Settlements and Infrastructure (ACCARNSI). The Stage 1 Case Studies Report and accompanying Portfolio of 18 Case Studies and Synopses, the Stage 2 National Survey Report, and Stage 3 Synthesis Report are publicly available to download from the ACCARNSI website - www.nccarf.edu.au/settlements-infrastructure/.
- Current Western Port Vulnerability Study:
www.melbournewater.com.au/content/library/current_projects/rivers_creeks_and_wetlands/westernport/Understanding_the_Western_Port_Environment.pdf
- Future Coasts program:
www.climatechange.vic.gov.au/adapting-to-climate-change/future-coasts
- Coastal Adaptation Pathways program:
www.climatechange.gov.au/government/initiatives/coastal-adaptation-decision-pathways.aspx
- Newly updated Shire website:
www.mornpen.vic.gov.au/Home
- www.mornpen.vic.gov.au/Environment_Waste/Climate_Change/Climate_Change_-_What_are_we_doing.



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