

LEGISLATIVE ASSEMBLY



Standing Committee on Natural Resource Management (Climate Change)

Report on Conference Attendance

14th Annual Conference of Parliamentary Public Works and
Environment Committees

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Committee terms of reference

The Legislative Assembly Standing Committee on Natural Resource Management (Climate Change) was established on 21 June 2007 to inquire into issues of sustainable natural resource management with particular reference to the impact of climate change and, in particular, to report on the following terms of reference:

- (a) The likely consequences of human-induced climate change on land (including salinity), water and other natural resources;
- (b) Options for ensuring ecologically sustainable natural resource use, taking into particular account the impacts of climate change;
- (c) Approaches to land and water use management practices on farms and other natural resource management practices, having regard in particular to the role of such practices in contributing to climate change or as a tool in helping to tackle climate change;
- (d) The effectiveness of management systems for ensuring that sustainability measures for the management of natural resources in New South Wales are achieved, having particular regard to climate change; and
- (e) The likely consequences of national and international policies on climate change on natural resource management in New South Wales.

Chair's foreword

Although I was not a member of the Committee at the time, I am pleased to table this report of attendance at the 14th Annual Conference of Parliamentary Public Works and Environment Committees held in Hobart from 21 to 23 October 2009.

I understand that these conferences provide valuable opportunities for committees with similar roles to exchange information and keep up to date on developments in other jurisdictions.

The Standing Committee on Natural Resource Management (Climate Change) was represented by its Deputy Chair, Mrs Karyn Paluzzano MP.

She subsequently provided the Committee with a verbal report of the conference at a meeting on 28 October 2009 where she noted that the sessions on the impacts of climate change on coastal erosion and the management of smoke through managed burning of forests were particularly helpful to the Committee's work on investigating sustainable natural resource management.

The rest of this report provides a description of the key points of each of the conference sessions and the information provided by the Committee to the other conference attendees.

I would like to thank the Committee's secretariat for its assistance in preparing this report.

Matt Brown, MP
Committee Chair

Chapter One - Proceedings on Wednesday, 21 October

- 1.1 The Conference was held in Parliament House, Hobart. The first day consisted of a welcome to the Conference, a presentation on forestry activities and a field trip to the Southern Forests.

Conference Opening

- 1.2 Delegates were welcomed to the Conference by the Hon Paul Harriss MLC, Chair of the Parliamentary Standing Committee on Public Works and the Hon Greg Hall MLC, Chair of the Parliamentary Standing Committee on Environment, Resources and Development.
- 1.3 The Hon Michael Field AC, a former Premier of Tasmania, officially opened the Conference and made a presentation about recent political history of Tasmania.

Presentations on Forestry Operations in Southern Tasmania

Forest Management and Harvesting

- 1.4 Mr Paul Smith, General Manager Operations, Forestry Tasmania introduced the delegates to forest management and harvesting practices.
- 1.5 Together with agriculture, mining and tourism, forestry is one of the four main industries in Tasmania. Forestry Tasmania manages 1.5 million hectares or 22 per cent of the State's 6.8 million hectare land area. In comparison, 2.7 million hectares (or 39 per cent) is in private hands and the remaining 2.6 million hectares is another sort of publicly managed land, mostly in reserves such as National Parks or the World Heritage Area. Most of it is cool temperate eucalypt forest that is prone to wildfires.
- 1.6 Forestry operations are governed by the Regional Forests Agreement of 1997 and the Tasmanian Community Forests Agreement of 2005. The National Forest Policy requires that 60 per cent of old growth forests be placed in reserves. In Tasmania 80 per cent of old growth forests are in reserves and almost half of all the forests in Tasmania are in conservation reserves.
- 1.7 Mr Smith stressed that the Tasmanian Government's policy was to maintain a viable forestry industry. All forestry harvesting is performed in keeping with management plans. Forestry Tasmania is certified in accordance with international standards and its practices strive for continuous improvement through internal and external audit processes.
- 1.8 Forestry Tasmania harvests and re-grows about one per cent of the State forests each year. Only about a third of this area is clear-felled with the rest harvested selectively with variable retention of sections of forest. There is a policy to reduce reliance on clear-felling to 20 per cent of the annual harvest of old growth forest by 2010.

Meeting the *Sustainability Charter*

- 1.9 Mr John Hickey, Manager Planning Forestry Tasmania discussed the organisations *Sustainability Charter 2008*. This is designed to be an accessible document in plain

English for the general reader. It provides a of the role of Forestry Tasmania's activities to meet its objectives of sustaining:

- biodiversity and habitat;
- jobs for current and future generations;
- carbon stores, clean air, water and healthy forests;
- community access and heritage; and
- science-based stewardship.

- 1.10 Forestry Tasmania is obliged to provide 300,000 tonnes of sawlogs per year. From 2020 half of this will come from plantations. The agency is changing its harvesting practices with the availability of plantations as the timber produced there is younger and smaller than timber from old growth forests.
- 1.11 Mr Hickey noted that there are around 350 million tonnes of carbon dioxide stored in the State forests and around a million tonnes are added each year.
- 1.12 In order to improve their environmental performance, in the past decade, Forestry Tasmania has reduced its use of chemical controls of weeds and pests by discontinuing the use of triazines as herbicides and 1080 as bait.
- 1.13 Mr Hickey noted that wildfires have an important role to play in forest management. With variable retention harvesting they are not able to burn as much of the forest debris which means that the risk of wildfire is greater as fuel builds up. There have been several major fires through the forests such as in 1881, 1914, 1934 and 1967-68. This is currently the longest stretch of time since European settlement without a major fire event.
- 1.14 Mr Hickey described the work of the Giant Trees Committee that lists trees that are more than 85 metres tall or contain 288m³ of wood. There are now more than 100 trees on the list at www.gianttrees.com.au. Sophisticated radar technology called LIDAR enabled the identification of the tallest existing tree, the Centurion, which is practically 100 metres tall. The site also lists the tallest trees ever identified with varying degrees of reliability. The biggest eucalypts were thought to be 400 years old from ring counts but recent carbon dating has shown some to be 500 years old.

Field Trip

- 1.15 The delegates then travelled by bus to the Tahune Hut in the Huon district of the Southern forests. Mr Peter Pepper, Community Liaison Officer Huon District Forestry Tasmania provided a history of forestry operations in Tasmania.
- 1.16 Delegates inspected the swinging bridges which are tourism facilities enabling bushwalkers to view the forest from above the ground. Some delegates the viewed forestry operations and the damage to the adjacent World Heritage Area caused by bushfires from the air.
- 1.17 The delegates travelled to Southwood integrated timber processing site and toured the ITC Ltd regrowth mill; Forestry Tasmania Merchandising Yard and the Ta Ann rotary veneer peeling mill. They inspected wood processing techniques at these facilities and learnt about the various products that could be produced.
- 1.18 At the Southwood mill the delegates saw the use of a laser guided band mill that delivers superior sawing accuracy and improves the proportion of logs that can be harvested by about a third more than traditional techniques.

- 1.19 At the rotary veneer peeling mill, delegates watched the radial slicing of thin layers of logs, drying and compression of layers to produce wood veneer.

Chapter Two - Proceedings on Thursday, 22 October

- 2.1 On the second day of the Conference, participants heard presentations on the National Broadband Network rollout, the Parliament Square Project, managing smoke from forest fires, the potential for generating power from forestry by-products and mapping the coastal impacts of climate change.
- 2.2 In the afternoon the public works committee members and the environment committee members split into separate streams to discuss issues of respective mutual interest. The day concluded with a plenary session to discuss future conferences.

National Broadband Network Rollout

- 2.3 Mr Martin Wallace, General Manager Strategy and Corporate Affairs for Aurora Energy provided a briefing on the first stage of implementing the National Broadband Network (NBN) in Tasmania.
- 2.4 Aurora Energy is a State Owned Corporation that wholesales and retails electricity, generates electricity in both Tasmania and Victoria and operates an internet service provider (ISP).
- 2.5 For eight years, Aurora has been involved in telecommunications and using Broadband over powerline (BPL) systems. Its network is the platform for National Broadband Network in Tasmania and company are agents of the National Broadband Network Company (NBNC) for the Tasmanian rollout.
- 2.6 The company's tender to the NBN involved a proposal to produce a Fibre to the Premises (FTTP) network. Under this plan there are synergies to use the State infrastructure developed by Aurora over a number of years.
- 2.7 Mr Wallace noted that Aurora was surprised by the Federal Government's announcement that Tasmania would be the test bed for the NBN rollout. The Tasmanian rollout will reach 200,000 premises in the next five years. It will be an open access wholesale network. Retailers possibly including Austar, Optus and Internode, are expected to provide a wide choice of products to consumers.
- 2.8 The project is starting on the east coast as there is no good backhaul link there. Stage 1 of the project is under the direction of the NBN Tasmania with Aurora as an agent. They are currently working on the East Coast link and the eastern part of the NBN. On 21 October, six more towns on the east coast were announced as priority sites for the NBN.
- 2.9 Aurora has a high quality network management system so staff know the location of every Aurora pole and premises. This means that the company has the capacity to design a network on a desktop to within a third of a metre without needing further research.
- 2.10 Mr Wallace noted that the plan was to implement the network first in regional towns in order to avoid duplicating existing services and discouraging investment. In addition, distribution in rural and regional areas presents challenges to which are different to those found in cities. This rollout will identify solutions that will help the planning of the rural and regional rollout in the rest of the country.

- 2.11 Aurora is predominantly using an aerial distribution on Aurora's poles with GPON access, Ethernet aggregation and MPLS core network. The company is trying to make the network future proof by allowing capacity for expansion. Fibre currently runs along the powerlines into towns. Every fifth pole will have a plug for fibre rather than using more expensive splicing techniques. The company has a plan for each area that tries to incorporate the expected growth as part of the future proofing.
- 2.12 Mr Wallace noted that underground cabling is a real challenge. In Tasmania they are likely to do 75 per cent of the rollout above ground but may try to use Telstra ducts where access is bad.
- 2.13 This is an enormously challenging project. They are lucky that they already have a range of management practices for such things as environmental compliance and OHS but they do need to set up training for contractors who will be doing the construction.
- 2.14 Mr Wallace noted that the distribution was more straightforward in Tasmania than in other states because the electricity infrastructure is under a single company rather than several companies.
- 2.15 There is however a decided lack of optical fibre in Tasmania compared to the rest of the country. Telstra and Aurora are the only companies to offer backhaul in Tasmania. This has led to higher costs for telephony than would be expected so that phone call costs between Hobart and Melbourne are ten times the cost of calls between Melbourne and anywhere else. Effectively Bass Strait is still a blackspot. Telstra has two links across Bass Strait. The reality is that the pricing is uncompetitive and he is hoping for a Bass Strait solution as part of the NBN rollout.

Parliament Square Project

- 2.16 Mr Paul Kingston, Director Procurement and Property Branch, Department of Treasury and Finance made a presentation on the Government's innovative plans for redevelopment of the Parliament Square.
- 2.17 The project will cover 8,100m² in area with eight main buildings, three of which are heritage listed and one nominated, while two more have some significant cultural importance. The project will include a new "green" or environmentally friendly building for long term lease by the Government and will involve demolishing the 1970s extension to Parliament House. Most of the eight buildings involved have been unoccupied for an extended period and have not been maintained, especially the heritage buildings. They would require multimillion-dollar renovations to be brought up to the requirements for modern offices. Proposals to redevelop the site have been raised for 15 to 20 years. There was extensive public consultation during the 12 month consultation process.
- 2.18 The current plan includes significant public open space. The Government has committed to 15,000 m² of office space on long term lease. This meant that the project has stayed on course despite the Global Financial Crisis. Construction was scheduled to start construction in 2010.
- 2.19 As part of the plan, the developer will own the land but significant parts of the site will have covenants of public use in perpetuity. The intent was that the heritage buildings be used rather than simply admired from outside. Potential developers were told that huge skyscrapers would not be suitable on the site and were issued with design parameters of fitting in with existing streetscape. The green building needed to be a

minimum of five stars but the Government was hoping that it could reach six stars. The developers were also told that only a minimum of 7,000 m² of government office space needed to be within the site while the rest could be located elsewhere.

- 2.20 The Government was seeking design solutions from the private sector rather than giving it strict criteria. For this reason it sought tenders from the open market requesting a purchase price and design proposals in accordance with some high level design objectives..
- 2.21 The Citta Group was appointed as the clear winner of the process. This company had worked with governments before on such projects as restoring the Mint building in Sydney. Citta group offered \$7.5 million for the site and \$7.5 million for restoration and renovation work of five buildings. Mr Kingston estimated that demolition would cost around \$8 million, the new building will be around \$45.5 million and \$4.5 million would be needed for creating the new public space.
- 2.22 The back of Parliament House will be demolished the Parliamentary services and Ministers will work in the new building. There will be a three-year construction timeframe and a “decant” strategy where workers will be moved to one of the buildings to be demolished at a later stage.

Forest Fires and Smoke – a Question of Balance

- 2.23 Mr Warren Jones, Director, Environmental Protection Authority (EPA) Tasmania provided a briefing on management of smoke pollution during planned burns by Forestry Tasmania.
- 2.24 Smoke pollution is one of the most contentious issues for EPA Tasmania. The current season has parallels to 1967 and 1968 when there were extremely bad wildfires because it combined high winter rains with an *El Nino* event.
- 2.25 Planned burns are used for bushfire management, biodiversity protection and harvesting some crops such as sugar cane.
- 2.26 Mr Jones noted that smoke contains particles that damage human health. It is the highest risk pollutant in Australia and there is no safe threshold for health impacts. Experts are now particularly worried about the health impacts of tiny particles of 2.5 micrometres or less (PM2.5) which can be absorbed into the lungs.
- 2.27 The national standards for exposure to particles relate to 24 hour time periods. This means that when burning events take place over four or five hours they may not exceed the daily pollution limits but there might still be significant health impacts.
- 2.28 In 2000, three per cent of annual smoke emissions in Tasmania came from planned burns but that proportion has now risen to 50-80 per cent because of the decline of the use of woodfires for heating. In Launceston in 2008 there were 19 days above the PM2.5 standard. Most of this was from planned burns not from wood heaters as wood heaters have almost disappeared from domestic use with a combination of education and bans on re-selling old ones. Wood pellets are used instead and produce much less pollution.
- 2.29 Mr Jones noted there is a need to trade off the environmental risk against the need to burn. There is an exemption from the penalties under the EP Act if the burns are conducted in accordance with a permit. There are environmental regulations, a policy on air quality, air quality strategy and a forest practices code which says that smoke should be minimised.

- 2.30 The EPA decided that in order to help minimise smoke during autumn when most controlled burns take place, they would introduce better prediction and coordination between the burning authorities. This would reduce the likelihood that all authorities would conduct burns on the same day when weather conditions were favourable. Mr Jones noted that conditions that were good for burning had low wind levels and so were also bad days for dispersing smoke out to sea and away from populated areas. This led to the development of a coordinated smoke management system.
- 2.31 Under this system, the State is divided into nine airsheds, each allocated a maximum amount of fuel that can be burnt. This can be adjusted up and down depending on weather and a model predicting smoke dispersal. Individual burning authorities bid on a website by 9.00 am to see if they are allowed to burn and the computer calculates an acceptable load. This can be overridden if there is an urgent need to conduct a burn.
- 2.32 When evaluated after the 2009 burning season, it seemed that air quality was better than in 2008 as there were only 12 occasions on which the limit was exceeded in Launceston, of which only four were caused by planned burning.
- 2.33 Users found the system worked well but the 2008 season unusual and it is unclear whether the fact that only half as much of forest was burnt as usual might have affected the air quality more than the use of this system to plan burning.
- 2.34 The EPA has identified a need to improve air quality monitoring throughout the State and plans to build low cost monitoring systems so that they can have almost real time information about air quality. They intend to put this information online for the public to see.

Biomass, the Renewable Energy Alternative

- 2.35 Mr Ken Jeffreys, General Manager Corporate Relations and Tourism, Forestry Tasmania, made a presentation on the agency's proposal to construct "biomass" generators using forestry by-products as a fuel source.
- 2.36 Biomass energy is a way to make the most of a renewable resource. Using timber as the source of biomass would help improve air quality and avoid burning. Wildfire is natural in Australian bush and burnt 80,000 ha in 2003. Forestry Tasmania burns 12,000 ha each year when they can control the burn.
- 2.37 Mr Jeffreys noted that it is a common assumption that when timber is harvested, native forest is replaced with plantations. In reality foresters revegetate harvested areas with endemic seeds by helicopter so they create "regrowth" forests. He noted that fires are needed to germinate the regrowth of these endemic species. Other options such as mechanical disturbance do not lead to the same level of regrowth. If there was a better way to do this, he assured the group that Forestry Tasmania would use it.
- 2.38 Mr Jeffreys noted that the best option for germination is a high intensity burn (where smoke is directed high into the atmosphere away from communities and out to sea). When Forestry Tasmania uses selective retention harvesting techniques, only lower intensity burns can be used in order to preserve remnant vegetation. This makes it much trickier to design the burn in order to avoid smoke pollution in communities.
- 2.39 Mr Jeffreys noted that burns coincide with peak tourism season. Forestry Tasmania works with Tourism Tasmania to avoid peak tourist events and with the wine industry to minimise smoke taint on crops. Forestry Tasmania is particularly keen to get

burns done in a timely way so seeds can be planted in time for the peak growing season. He considered that the coordinated smoke management system is a great help to the forest industry as it defines acceptable parameters and delivers another step along the line to continuous improvement of the agency's performance.

- 2.40 Forestry Tasmania also conducts fuel reduction burns in order to minimise risk of wildfires and the season for this started in mid October.
- 2.41 Forestry is one of the few carbon friendly industries and in Tasmania the forests are carbon sinks. Mr Jeffreys saw the next logical step to use the wood as the source renewable energy. In Europe, for instance, the World Wildlife Fund is advocating that 15 per cent of electricity should come from biomass.
- 2.42 Forestry Tasmania argues that as a lot of smoke pollution is from the forest debris, if this could be collected and used, the level of smoke could be reduced. Up to 1 million tonnes of this wood which is not useful for anything else could be harvested a year and used for biomass generation.
- 2.43 Mr Jeffreys noted that while the waste timber provides habitat for animals and some waste would be needed for fires for regeneration, 70 per cent of heavy waste could be removed without significant harm to habitats of such creatures as bugs and giant velvet worms or preventing the use of fire for regeneration.
- 2.44 Biomass generators are not like wood heaters. The technology is very good now so that they now have no visible smoke although there are some particles in the air. Biomass can produce baseload power unlike solar and would lead to better regional power supplies.
- 2.45 Under the proposal for biomass plants, Forestry Tasmania would work with private sector partners. Mr Jeffreys noted that the Southwood sawmill is ready to implement a new biomass energy plant of 20 Megawatts which is enough for all homes south of Hobart. It would use around 200,000 tonnes of timber each year.
- 2.46 A biomass plant in Finland can produce 87 Megawatts and one in California produces 49 Megawatts. An alternative approach to a single large plant would be lots of smaller plants. This is the approach being taken in Canada.
- 2.47 Forestry is a very polarised issue in Tasmania and there are significant political impediments to the biomass generation proposal. Opponents to biomass generation are worried that by agreeing to this they would be seen as endorsing forestry. Mr Jeffreys suggested that the debate in Australia needs to mature significantly before the types of plants that operate in Scandinavia could be built in Australia.

Australian Approaches to Coastal Erosion Vulnerability Assessment

- 2.48 Professor Chris Sharples, a geomorphologist from the University of Tasmania's School of Geography and Environmental Studies, provided an overview of coastal erosion vulnerability particularly under the effects of climate change.
- 2.49 Professor Sharples has developed the 'Smartline' system, a tool for geomorphic and stability mapping of the coast of Australia.
- 2.50 Coastal erosion happens all the time but it is not particularly visible on hard surfaces such as rock. Sandy shorelines have the capacity to be eroded but then can be replenished by wave actions. Sand often comes back after being taken out to sea for a while. With or without sea level rise, shores will erode but clay, gravel and soft rock shores do not rebuild through natural processes.

- 2.51 Records show that sea levels have risen by 14 cm at Port Arthur since 1840. Professor Sharples noted there are strong arguments to suggest that sea level rise will lead to increased soft shore erosion. Under the 'Bruun Rule' of erosion, as sea level rises, the shore erodes back to its former profile with less area in the order of a metre per centimetre.
- 2.52 The southern parts of Britain are subsiding at the moment as they have been for thousands of years. Australia is more geologically stable but because of sea level rise, it will still be facing this sort of erosion in the future. Professor Sharples noted that the least vulnerable coastal areas are rocky headlands with sandy beaches on either side.
- 2.53 The Smartline is a colour-coded mapping format that uses digital maps of the coast to incorporate multiple data fields. Professor Sharples used this system to map Tamarama in Sydney several years ago. In 2006 his team produced a report on the Tasmanian coastline to incorporate an identification of which areas of the coastline were most vulnerable to the potential impacts of climate change. In 2007, the Department of Climate Change commissioned them to produce nationally consistent mapping.
- 2.54 Professor Sharples explained that this was a huge and complex task as there were more than 200 different datasets of various ages and purposes. Data was extracted and reclassified automatically.
- 2.55 The Smartline tool is a very sophisticated system that provides information on the topography at various levels including shore, ocean floor and the landscape behind the shore.
- 2.56 The second pass assessment of the data included an assessment of average wave height. The next stage is to combine this with the geomorphic characteristics to identify vulnerable areas. The third pass is a site specific assessment of all characteristics of "hotspots". Some of these have been done already especially in New South Wales.
- 2.57 Sea walls are appropriate treatments of the effect of climate change if they are used properly. Inappropriate sea walls can allow erosion on either side of them and can be undermined from behind. It is extremely expensive to install sea walls appropriately so they should be targeted to the most valuable areas. A better option might be for the government to buy vulnerable land. Professor Sharples noted that in Norfolk in Britain, there are hundreds of kilometres of barrages that did not have the desired results and actually increased the level of erosion. The Government has decided to withdraw and protect some historical landmarks rather than everything.

Environmental Stream Discussion

- 2.58 In this session, members of committees had the opportunity to present their views on important environmental issues and discuss the work of their respective committees.
- 2.59 Mrs Karyn Paluzzano provided the delegates with the activity report listed at Appendix One.
- 2.60 Ms Meredith Hunt MLA of the Australian Capital Territory's Climate Change, Environment and Water Committee described her Committee's inquiry on the ACT greenhouse gas reduction targets and the Australian Institute's report on the impact on State budgets of the proposed Carbon Pollution Reduction Scheme.

Proceedings on Thursday, 22 October

- 2.61 The Hon John Pandazopoulos MP of the Victoria provided an overview of the Environment and Natural Resources Committee's reports on land management and bushfires. Another inquiry on meeting Melbourne's future water needs investigated whether a new dam was needed. This stopped short of recommending recycled water but did recommend the end of the ocean outfalls for sewage treatment as a way of improving seawater quality.
- 2.62 Ms Lyn Breuer MP from South Australia reported that the Environment, Resources and Development Committee had conducted an inquiry into natural burial practices and noted that its inquiry into BHP's proposed site for a desalination plant had led to the planned site being moved 100 km down the gulf.
- 2.63 The Greg Hall MLC reported that the Tasmanian Joint Committee on Environment, Resources and Development had recently conducted an inquiry into alternative fuels which noted the lack of a State energy security policy. This has since been addressed by government action. The Committee planned to conduct an inquiry into wildfires soon.

Plenary Discussion

- 2.64 In the final session, delegates discussed the structure of future conferences and considered whether they should continue to be held jointly or whether back to back separate conferences would suit more members. After much discussion, there was agreement to continue with the current format. The House of Representatives invited attendees to the next conference in Canberra in July 2010.
- 2.65 The Hon John Pandazopoulos MP advised of a recommendation by the regional Commonwealth Parliamentary Association to improve regional knowledge. It was agreed that all jurisdictions would encourage representatives from their twinned parliaments to attend these conferences.

Chapter Three - Proceedings on Friday 23 October

- 3.1 On the final day of the Conference, delegates assembled at Parliament House for a field trip south of Hobart where they would examine examples of coastal erosion and visit the world heritage listed tourism site at Port Arthur.

Coastal Erosion

- 3.2 Professor Chris Sharples of the University of Tasmania continued his discussion of the impacts of coastal erosion by pointing out sites where soft rock cliffs and sand had been eroded by tidal action. Counter-intuitively more sheltered areas suffered worse erosion than areas exposed to waves because they did not receive new sand deposits i
- 3.3 The group visited two southern beaches where erosion was particularly prevalent – Okines Beach and Eaglehawk Neck where remedial action such as rock walls had provided only temporary respite. Professor Sharples noted that the local council needed to plan for damage to properties built close to the water's edge.

Port Arthur

- 3.4 The delegation then travelled to the Port Arthur Historic site. This former penal colony was closed in 1877 and over time has become Tasmania's foremost tourism attraction.
- 3.5 It is operated by a government business enterprise called the Port Arthur Historic Site Management Authority which aims to manage the site by:
- Conserving the heritage values of the sites;
 - Creating a unique and interactive visitor experience;
 - Ensuring its financial viability;
 - Valuing its staff; and
 - Considering the community.
- 3.6 Mr Stephen Large, Chief Executive Officer, Port Arthur Historic Site Management Authority provided the delegation with an overview of the challenges of managing such a fragile, complex and internationally important site. He noted that it was the largest source of employment in the region but only provided seasonal jobs. A particular challenge was to rebuild and regroup after the 1996 mass shooting at the site. Since then a new visitors' centre had been constructed.
- 3.7 Dr Jane Harrington, Director Conservation and Infrastructure described the types of archaeological and conservation work conducted at the site in conjunction with academic institutions. New information is found every season about how people lived and worked at the site. Dr Harrington noted that buildings tended not to be reconstructed any more unless they could not be understood any other way.
- 3.8 The delegation then toured the visitors' centre and examined some of the buildings on the site.

Proceedings on Friday 23 October

- 3.9 They then returned by coach to Hobart. Some of the delegates attended a reception at Government House hosted by His Excellency the Governor of Tasmania, Hon. Peter Underwood AO and Mrs Underwood which closed the Conference.

Appendix One – Committee Activity Report

Mrs Paluzzano provided the following report of the activities of the Standing Committee on Natural Resource Management (Climate Change):

Since the last conference which we hosted with the Standing Committee on Public Works in Sydney last year, the New South Wales Standing Committee on Natural Resource Management (Climate Change) has changed quite a bit. Firstly, Rob Oakeshott left the Committee when he resigned from the Legislative Assembly in order to run for Federal Parliament and is now the Member for Lyne. Greg Piper was appointed in his place. We then had a change in Committee Chair when I was appointed as a Parliamentary Secretary and I am now the Deputy Chair. David Harris was appointed to the Committee and became the new Chair. In September this year he was appointed as a Parliamentary Secretary and is unlikely to remain on the Committee. The former Deputy Chair, Michael Daley became Minister for Roads in September and is now Minister for Police.

As you would all be aware 2008-09 was a time of rapid development of policies and programs to address climate change by the State and Federal governments. The Committee contributed to this debate with its first two major inquiries on:

- Climate Change and Natural Resource Management in New South Wales (completed in December 2008) and
- The Impacts of Emissions Trading Schemes on Natural Resource Management (completed in May 2009).

The Committee was pleased by recent correspondence from the Minister for Climate Change and the Environment that suggested its report on emissions trading schemes would be a valuable input to future policy development.

In March 2009, the Committee commenced a new inquiry into managing the impacts of climate change on biodiversity in New South Wales.

Since the last conference, the Committee has held four days of public hearings to examine witnesses as part of the inquiries into biodiversity management and emissions trading schemes. It also received briefings from key state agencies and local governments on climate change policies.

The Committee conducted three visits of inspection:

- In November 2008, a delegation visited the Central West region of the State to learn about innovative land management practices and attend the Carbon Farming Expo and Conference in Orange;
- In March 2009, the Committee travelled to the Hunter region to examine demonstrations of biochar generation, new renewable energy technologies and carbon capture and storage; and
- In September 2009, the Committee travelled to the Monaro and South Coast regions to learn about the incentives, obligations and outcomes of different biodiversity conservation programs on private property.

The Committee plans to complete its inquiry into biodiversity management by the end of the year.

Appendix Two - Extracts from minutes

Minutes of Proceedings of the Standing Committee on Natural Resource Management (Climate Change) (No. 5)

11.07 am, Wednesday 3 June 2009

Room 1254, Parliament House

Members present

Mr Harris, MP (Chair)

Mrs Paluzzano, MP

Mr Piper, MP

Apologies

Apologies were received from Mr George, Mr Martin and Mr Williams.

General business

The Committee discussed the upcoming 14th Annual Conference of Parliamentary Public Works and Environment Committees to be held on 21-23 October in Hobart. The Committee noted that the Conference would coincide with NSW Legislative Assembly sitting days and resolved to discuss the matter again at the next Committee meeting.

The Committee discussed arrangements for the upcoming public hearing on 22 June 2009.

The Committee adjourned at 12.02 pm until 9.30 am on Monday 22 June 2009.

Minutes of Proceedings of the Standing Committee on Natural Resource Management (Climate Change) (No. 7)

11.00 am, Wednesday 24 June 2009

Room 1254, Parliament House

Members present

Mr Harris, MP (Chair)

Mr Martin, MP

Mr Williams, MP

Apologies

Apologies were received from Mr George, Mrs Paluzzano and Mr Piper.

Parliamentary Public Works and Environment Committees Conference

The Committee discussed attendance at the upcoming 14th Annual Conference of Parliamentary Public Works and Environment Committees to be held during a sitting week on 21-23 October in Hobart. Mr Martin undertook to discuss the issue with Mr Maguire and advise the Committee of the feasibility of members being excused from Parliament to attend.

The Committee adjourned at 11.36 am until 11.00 am on Wednesday 2 September 2009.

Minutes of Proceedings of the Standing Committee on Natural Resource Management (Climate Change) (No. 9)

11.01 am, Wednesday 2 September 2009
Room 1254, Parliament House

Members present

Mr Harris, MP (Chair)
Mr Martin, MP
Mr Williams, MP
Mrs Paluzzano, MP

Apologies

Apologies were received from Mr George and Mr Piper.

Visitor

The Chair welcomed Ms Beth Mulock, an intern working in the office of Mrs Paluzzano, as an observer to the meeting.

Parliamentary Public Works and Environment Committees Conference

Resolved on the motion of Mr Martin, seconded by Mrs Paluzzano:
That two committee members and one member of staff should attend the 14th Annual Conference of Parliamentary Public Works and Environment Committees on 21-23 October in Hobart.

The Committee adjourned at 11.30 am until 11.00 am on Wednesday 23 September 2009.

Minutes of Proceedings of the Standing Committee on Natural Resource Management (Climate Change) (No. 10)

11.00 am, Wednesday 28 October 2009
Room 1254, Parliament House

Members present

Mrs Paluzzano, MP (Deputy Chair)
Mr George, MP
Mr Martin, MP
Mr Williams, MP
Ms Hay, MP
Mr Piper, MP

Acting Chair

In the absence of a Committee Chair, the Deputy Chair took charge of the meeting.

Change in Committee membership

The Deputy Chair reported that, earlier that morning, Mr Harris had been discharged from the Committee and Ms Hay had been appointed to serve in his place. The Deputy Chair welcomed Ms Hay to the Committee.

Election of Chair

As a vacancy had arisen in the in the position of Chair, the Deputy Chair called for nominations for election of a new Chair.

Appendix Two - Extracts from minutes

Mr Williams, seconded by Mr George nominated Mr Piper.
Ms Hay, seconded by Mrs Paluzzano nominated Ms Hay.

There being two nominations, a vote of the Committee was taken.

Mr Piper received 3 votes [Mr George, Mr Piper, Mr Williams]
Ms Hay received 3 votes [Ms Hay, Mr Martin, Mrs Paluzzano]

The Committee Manager advised that in the event of an equality of votes, the Chair had a casting vote.

Mr Williams requested confirmation of this advice by the Clerk. The meeting adjourned while this advice was sought. The Committee Manager advised the meeting that the Clerk, Deputy Clerk and Clerk Assistant (Procedure) concurred that Mrs Paluzzano as Acting Chair had the casting vote and Ms Hay was elected Chair.

Visitor

The Chair welcomed Mr Harris, the former Chair of the Committee as a guest to the meeting.

Parliamentary Public Works and Environment Committees Conference

Mrs Paluzzano provided a verbal report on her attendance at the 14th Annual Conference of Parliamentary Public Works and Environment Committees on 21-23 October in Hobart. A written report will be prepared for consideration.

The Committee adjourned at 11.25 am until Wednesday 11 November at a time to be fixed.

Minutes of Proceedings of the Standing Committee on Natural Resource Management (Climate Change) (No. 1)

11.00 am Wednesday 24 February 2010

Room 1254 Parliament House

Members present

Mrs Paluzzano, MP (Deputy Chair)

Mr Brown, MP

Mr Martin, MP

Mr Piper, MP

Apologies

Apologies were received from Mr George and Mr Williams.

Acting Chair

In the absence of a Committee Chair, the Deputy Chair took charge of the meeting.

Change in Committee membership

The Deputy Chair reported that, earlier that morning, Ms Hay had been discharged from the Committee and Mr Brown had been appointed to serve in her place. The Deputy Chair welcomed Mr Brown to the Committee.

Election of Chair

As a vacancy had arisen in the in the position of Chair, the Deputy Chair called for nominations for election of a new Chair.

Resolved, on the motion of Mr Martin, seconded by Mr Piper:
That Mr Brown be elected Chair of the Committee.

The Committee adjourned at 11.27 am until Wednesday 10 March at 11.00 am.

Chair

Committee Manager

Minutes of Proceedings of the Standing Committee on Natural Resource Management (Climate Change) (No. 4)

11.05 am, Wednesday 17 March 2010
Room 1043, Parliament House

Members present

Mr Brown, MP (Chair)
Mr Martin, MP
Mr R Williams, MP

Mrs Paluzzano, MP

Apologies

Apologies were received from Mr Piper and Mr J Williams.

Membership change

The Committee noted that on 11 March 2010 Mr John Williams was appointed to the Committee in place of Mr George who was discharged.

The Committee adjourned at 11.54 am until Wednesday 21 April at 11.00 am.

Chair

Committee Manager

Minutes of Proceedings of the Standing Committee on Natural Resource Management (Climate Change) (No. 3)

11.05 am, Wednesday 21 April 2010
Room 1043, Parliament House

Members present

Appendix Two - Extracts from minutes

Mr Brown, MP (Chair)
Mr Martin, MP
Mrs Paluzzano, MP

Mr Piper, MP
Mr R Williams, MP
Mr J Williams, MP

Consideration of Chair's draft report

The Committee considered the Chair's draft *Report on Conference Attendance: 14th Annual Conference of Parliamentary Public Works and Environment Committee*. Mrs Paluzzano proposed that paragraph 3.9 be amended to clarify that not all delegates attended the close of the Conference.

Resolved on the motion of Mrs Paluzzano seconded by Mr R Williams

That the Committee adopt the report as amended and agree to the Chair tabling it.

The Committee adjourned at 11.42 am until Wednesday 12 May at 11.00 am.

Chair

Committee Manager