

Climate Health WA Inquiry

About your submission

Are you responding on behalf of an organisation or group?

No

Yes

If yes, please identify the organisation: Western Australia Country Health Services (WACHS)

Your contact details

The following information will not be published without your permission but enables the Inquiry to contact you about your submission if required.

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WACHS submission to Climate change Department of Health (DoH) review

WACHS recognises the following critical issues regarding this issue:

1. A study in The Lancet (Jan 2018) the carbon footprint attributed to health care was 7% of Australia's total; that is, similar to the entire carbon emissions of all activities associated with 7% of Australians
2. The World Health Organisation (WHO) identifies climate change as the greatest threat to global health in the 21st century.
3. The majority of the population that WACHS services are coastal, that is are at risk from impact of rising sea levels and land /infrastructure loss. Health Campuses such as the newly built Busselton Health Campus would be at great risk in this scenario.
4. Extreme heat and other extreme weather events are predicted to become more frequent and more severe. Heat waves and the increased bushfire season and risk pose a grave threat to rural communities.
5. It is the vulnerable members of our communities who are at greatest risk from the impacts of these events.
6. Over the last century we have seen approximately a 1 degree temperature rise and a 20 % reduction in rainfall in the south west of the state, which will impact on viability of rural areas with consequent impacts on livelihoods and mental health.

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7. There is also the risk of changing patterns of vector borne illness, including Malaria and Dengue in the north of the state, and envenoming's such as Irukandji occurring more extensively down the coast.
8. Other identified health and infrastructure risks, particularly relevant to the northern regions have been articulated in attached submission from Dr Heather Lyttle from the Pilbara region (Attachment 1).
9. Inaction from a mitigation perspective and delays in adaptation pose an economic risk to the organisation.

WACHS therefore recognises they have a major investment in mitigation and adaptation to the impacts of climate change.

Current action in WACHS includes:

1. WACHS South West (SW) is a member of the Global Green and Healthy Hospitals (GGHH) community. The south west coastal region of Busselton Health Campus, Margaret River and Augusta hospitals has begun preliminary work to create an exemplar pilot site, a 'Green Hospital Initiative' in this coastal belt. The aim is to create a template for health service change that can be exported and reproduced in other sites, following the principles outlined by GGHH. There is overwhelming staff support for this initiative. A request for a project officer to commence this work is currently being considered by WACHS central. The project would be managed through the WACHS coastal executive. Success of this project and export of the approach to other sites would ensure WACHS does everything it can to mitigate it's own healthcare generated emissions and waste. Similarly Broome hospital has been active in exploring its opportunities in this area.
2. WACHS, and in particular it smaller health services, have the systems and capacity to identify vulnerable community members at risk in their regions and to develop local plans to respond in the event of extreme weather events to ensure the welfare of those community members.
3. WACHS staff with expertise in this area are currently and will continue to lecture and educate on the health implications of climate change both regional and global. Dr Mark Monaghan, Director Medical Services (DMS) SW coastal has published on the subject of health and Climate change , has presented at the Rural Health West annual conference and recorded a podcast for that organization and is lecturing on this subject for the Rural Clinical School. Dr Heather Lyttle, public health physician from the Pilbara has a particular interest in the health impacts of climate change.
4. There is overwhelming staff support for initiatives to reduce waste and to recycle within our health campuses across the organisation.
5. WACHS is currently applying for organisational wide membership of the GGHH.
6. WACHS has formed a waste committee to monitor and report waste management practices and opportunities across WACHS. This committee

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reports to the executive and will advocate and inform the Executive on opportunities for improvement in relation to waste management innovation and recycling/ environmental opportunities.

WACHS also sees opportunities, which include the following:

1. There have been several recommendations from within the organisation for a sustainability committee, led by a sustainability manager and reporting to WACHS executive to oversee the environmental performance of WACHS across the organization (Attachment 2 – note WACHS Midwest submission). This committee could assist sites to develop environmental management plans around energy utilisation, emissions, waste management, water and transport utilisation and create performance benchmarks as endorsed by the WACHS board.
2. To engage with consumers, who have a strong voice in this area, to identify opportunities to minimize our environmental impact from a whole of health perspective.

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In the Pilbara we have frequent issues with the heat and cyclones in summer.

This will get worse with climate change.

We will have less frequent (or more frequent) but more severe cyclones with subsequent:

- Damage to infrastructure of health facilities, flooding, roof damage, impaired internet, and possible evacuation of some hospital patients or early discharges required when a cyclone is predicted.
- Flooding and impaired access to the hospitals (particularly between Port Hedland and South Hedland where flood plains lie in between – cutting off access for sick persons in the Port to access the hospital in the case of emergencies – i.e. trauma, women in labour, cardiac or respiratory emergencies. The same flood plains contain the airport and it is often closed in times of cyclones and flooding so stopping access for emergency support services so fixed wing services e.g. RFDS cannot operate or land i.e. severely ill patients cannot be conveyed to Perth as usual. (we do not have an ICU in Hedland or Karratha – just a
- Hedland will have impaired access by road – often main roads north and south are closed due to flooding, and many Pilbara towns and communities are isolated by flooding after cyclones, so that emergency support services cannot enter, or be resupplied with food or water.

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- Cyclones and rising tides may mean more extensive tidal flooding in cyclones and either relocation of houses by the sea or more extensive evacuation of houses in times of cyclones and the need for more numerous purpose built shelters. This is particularly so for those with poor housing or those living outside with no housing.
- Water supplies from underground supplies (usually rivers) may reduce with increasing heat, and less rain, and lead to new water sources needing to be found for the towns. Wells can be contaminated with local ground elements so the water supply needs to be considered carefully and monitored.

The heat (and winds) will become more severe causing

- Heat stroke occurs more often when temperatures in the mid 40's- 50'sC so causing more ED presentations and/or hospital admissions.
- Dust issues – these cause respiratory issues of asthma and possibly other respiratory issues or cardiac issues. Dust has been an ongoing issue in the town of Port Hedland and has not been remediated by industry, which contribute to the more intense issues of dust to the nearby residents than elsewhere in the Pilbara.
- Environmental heating of cold water in pipes can lead to build up of bacteria and a biofilm in those pipes not used often. This leads to possible inhalation in a shower situation. Recent episodes of legionella in Karratha and Onslow hospitals water pipes and in that of some ships and tugs and mining equipment in Port Hedland and Karratha.
- Possible changes in mosquito borne diseases as the mosquito species may change with increased heat leading to diseases not currently native in the Pilbara occurring eg Dengue and Malaria.
- Currently following cyclones and the changes in migration of water birds into the areas following the flooding we have more dangerous mosquito borne diseases ie Kunjin and Murray Valley Encephalitis. If the flooding is more extensive these may increase.
- Gastroenteritis occurs more frequently in summer in the Pilbara when food is not kept chilled. Sandwiches or cooked chicken pieces prepared for lunches in the mornings from fridges can be risky by lunchtime if not kept in proper conditions. This seasonal increase in gastro intestinal infections is likely to increase.
- Swimming pools either in the home backyard or the town or community public pool, will also need to be tended more regularly to ensure no build-up of bacteria. We recently had an outbreak of rotavirus associated with swimming in the main Karratha public pool which required shut down and re-chlorination.
- Diseases of the soil and wet in the tropics may become more frequent in the Pilbara eg melioidosis has only occurred infrequently in the Pilbara until now but this may be a more frequent hazard.

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- Increasing humidity will lead to more fungal contamination of damp areas in homes – we have had several instances of mould causing respiratory illnesses and mould affecting hospital walls in the Pilbara and those of other institutions eg TAFE buildings, and domestic housing.

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Health systems contribute a significant amount of carbon emissions throughout the services it provides. It has the opportunity to develop Sustainability Management Plans to assist in reducing carbon emissions and have a positive impact on the reduction of global warming. Whilst it is the responsibility of the WACHS community to be engaged with the delivery of sustainable services, it is imperative to have a sustainability manager that is able to develop and represent the WACHS community now and going forward into the future.

Carbon foot printing of the service is a complex process and should include the usual areas of consideration such as emissions from electricity, gas and water usage, as well as the identification of products that have greenhouse gas emission potential such as air-conditioning plant and process driven environments such as sterilisation departments. Additionally we also need to consider the carbon impact of WACHS on the environment due to procurement activities, deliveries, travel and service delivery.

Quick wins on the reduction of carbon from healthcare facilities are easily quantifiable and notable. Energy reduction schemes, education and the development and use of recyclable energy should be at the forefront of healthcare services thinking and certainly be included in any facility developments. Additionally, waste reduction, sustainable transport models such as the "Green transport strategies" should also be considered and developed and it has been proven that organisations that have implemented such management plans see higher staff

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engagement in this area as well as supporting staff health & wellbeing and that of their families

It should be a consideration of not only WACHS, but all HSP's to develop sustainable Management plans which are endorsed by their respective boards and adopted by the regional services to assist in driving sustainable futures both economically and environmentally. There are many health services that could provide examples of such plans both nationally and internationally and WACHS should develop its own agenda to support the delivery of WACHS Strategic plan 2019-24.

It is envisaged that all procurement activities should consider the impact of the product or service being delivered and have clear documentation in relation to carbon foot printing of the provided service, recycling of waste products and delivery modes of the services being provided. It is recognised that WACHS has significant challenges in the area of procurement due to its fast geographical size but it is possible to consolidate services and deliveries to minimise the impact on the environment.

It is important to reflect that whilst Carbon Management Plans (CMP's) have been proven to be successful at targeting a reduction in emissions associated to health facilities, this should be an area that is developed within an overarching Sustainability Management Plan.

Health has a great opportunity to assist in the development of sustainable models of care that consider the needs of the community as well as the need to limit the impact of the health services on the environment. We should as a health community provide a sustainable future for our patients, clients, staff and families.

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WA Country Health Service – Wheatbelt has recently completed construction of two new health centres at Pingelly and Cunderdin. These two sites have embraced a number of environmental design principles, which will reduce the impact on the climate. Examples of design features include the utilisation of airlocks (to improve climate control & avoid wind tunnels, use of natural light, laminated safety glass windows & treatments to reduce heat transfer, water wise gardens & landscaping and installation of a solar panel arrays to produce electricity. The plan is to conduct projects in line with the Global Green & Healthy Hospitals Challenges.

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