

# CONCURRENT SESSIONS

Wednesday 11 November

Concurrent Session A 11.05am-11.50am

## A1 Future Climates; Uncertainties and Projections

Prof Michael Stoddart  
*Climate is complex, and complex to explain. The public debate on what has been described as the greatest challenge facing humanity is often characterised by opposing views, presented by scientists and decision makers and often whipped into a storm by the media. There is debate about whether climate change is happening and to what extent human-produced CO<sub>2</sub> is driving it. Where are the main areas of uncertainty in the debate? If you were a decision maker would you know enough about climate science to make an informed judgement about an ETS? This presentation tries to identify the key issues and to equip you with some tools to analyse the complexity.*

## A2 Second Life: A Tool for Teaching Hazardous Environment Inspections

Dr Kirstin Ross  
*We are building an Environmental Health village in Second Life. Students create an avatar that is able to interactively explore the virtual village. We have built a sports centre that is the focus of a suspected Legionella pneumophila outbreak. Students are given information sequentially, with progressively more information becoming available as they undertake investigation. This approach may provide a learning method for professional development of practicing environmental health professionals in other 'unsafe' environments, for example methamphetamine laboratories. This presentation will demonstrate this new teaching approach, discuss students' responses to their learning experience, and explore the potential use of Second Life for professional development purposes.*

Concurrent Session B 11.50am-12.30pm

## B1 The Risk of Sea-Level Rise in Australia

Dr John Hunter  
*Sea-level rise, in common with many other aspects of climate change, entails significant future risks which are ideally addressed using a formal risk assessment process. However, in cases where there is meagre understanding of the processes involved and where the consequences of inappropriate action are dire, an adaptation strategy is often based on a worst-case scenario, derived from "expert advice". This option (the precautionary principle), which involves minimal risk assessment, will in most cases lead to costly over-adaptation. It is unfortunate that this approach, which is effectively a "one size fits all" solution, is sometimes adopted even where there is significant data with which to support formal risk assessment. It will be argued that this is indeed the way in which the problem of sea-level rise is being addressed by governments around Australia. While being a simple solution, it will undoubtedly involve unnecessary expenditure of resources - resources which could be better spent by society on more effective adaptation or on mitigation.*

## B2 An Environmental Health Perspective of the Influence of Climate Change on Marine & Freshwater Toxic Algae in QLD.

Dr Glen Shaw  
*Cyanobacteria (blue-green algae) can be present in water storages where their toxins, if not suitably treated, are available to persons consuming drinking water. The influences of climate change are highly likely to result in elevated levels of cyanobacteria and their toxins, and the presence of these toxins is likely to be extended for longer time periods during the year. In the marine ecosystem, certain algae (dinoflagellates) can produce extremely toxic compounds which can result in ciguatera fish poisoning. It is predicted that the incidence of this disease will be elevated under climate change conditions.*

Concurrent Session C 1.30pm-2.15pm

C1

## Global Climate Change and Heat Stress Among the Aged, a Proposed Multi-State Study Involving EHOs

Dr Jacques Oosthuizen  
*EHOs have an important role to play in monitoring heat wave conditions and taking action to prevent large scale health impacts. This research project proposes;*

- Measure levels of heat exposure experienced in the homes of vulnerable groups such as the elderly during heat wave conditions.
- Determine levels of understanding of heat related risks as well as informal coping strategies currently employed by the elderly to cope with hot weather.
- Test an inexpensive, readily available intervention to reduce core body temperature among the elderly under heat wave conditions.

C2 Title to be Advised.

Jan Bowman

Abstract summary to be advised

Concurrent Session D 2.15pm - 2.45pm

## D1 Health and the New Urbanism: Environmental Health's contribution to a social sustainability agenda

Mark Boyd

*The new urbanism movement is revolutionising city development across the world, with a focus on fostering sustainable cities that:*

- enhance community life for residents, workers and visitors;
- adapt to emerging climate change impacts;
- live within their means; and
- are economically competitive in a global market place.

*Social sustainability is an integral pillar in this new urbanism and aims to ensure a high level of health, wellbeing and inclusion for everyone in the community. What is the environmental health profession's role in contributing to the social sustainability goals of the new urbanism? This presentation reviews emerging practices in food security and local food production, adaptation to climate change, and alcohol harms management and identifies new opportunities to involve environmental health in contributing to sustainable city development.*

## D2 An Environmental Health Officer's Role and Response to Natural Disasters.

Ingrid Makowski

*On the 7th February 2009 Victoria was hit by the most tragic natural disaster in the State's history. This paper considers the EHO's role in Emergency Management subsequent to the "Black Saturday Fires" in the Yarra Valley as integral in the relief and recovery of the communities involved. Several vignettes will illustrate work in a confronting environment. Discussion of two models will highlight the personal challenges to individual EHO's knowledge, ability and willingness to respond under enormous stress in environments that induced apprehension and fear.*

Concurrent Session E 3.15pm - 3.50pm

## E1+F1 Datasets and Indicators: What Should Environmental Health be Measuring to Address Climate Change Impacts?

(Double Session with F1)

Mark Boyd

*There are eight potential impacts of climate change on environmental and human health including:*

- more extreme weather and temperature events;
- increased risks of water, food, and air-borne diseases;
- potential impacts on food production; and
- impacts on community mental health and wellbeing.

*This workshop asks what data would help us at a local level to plan, report and monitor actions aimed at adapting our communities to these emerging impacts. The workshop will identify what datasets are necessary. Importantly, the workshop will discuss which datasets can be used as indicators to measure the impact of environmental health actions to respond and adapt to climate change.*

## E2 Cleaner Production Program in the Wetherill Park - Smithfield Industrial Estate

David Wilson

*As the former Manager of Environment & Health at Fairfield City Council, David Wilson project managed an innovative approach to environmental management with local businesses in Australia's largest industrial estate. The program produced \$1.2 million in environmental savings for the participating businesses, and has provided a series of innovative case studies that other local businesses will be able to learn from. Being green doesn't mean being a "tree hugger", but it does make great business sense to reduce your waste production, energy, water and materials use.*

Concurrent Session E 3.50pm - 4.30pm

## F1 Datasets and Indicators: What Should Environmental Health be Measuring to Address Climate Change Impacts?

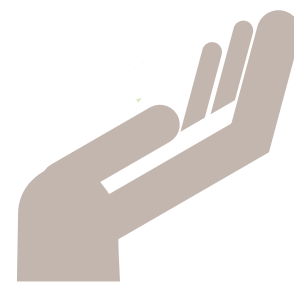
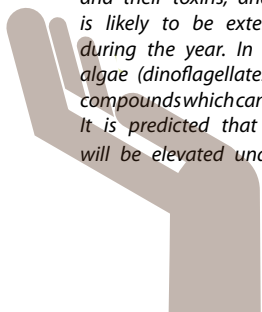
(Double Session with E1)

Mark Boyd

## F2 Operation Vic Fire Assist

Flt Lt Shane Murphy

*The Black Saturday bushfires in Feb 2009 killed 173 people and left thousands more homeless. The Australian Defence Force's (ADF) contribution to fighting the fires and cleaning up ended in late March after seven weeks continuous assistance. At its height, 850 ADF personnel provided direct support to emergency workers and affected services whilst countless others provided support from hundreds or thousands of kilometres away. An ADF Environmental Health team was deployed to conduct a review of the environmental and occupational hazards and implement initial preventative measures that pose a threat to the ADF personnel and civilians in the Murrundini Shire of Victoria. Initial site surveys involved inspection of sites and implementing initial preventative health measures and included general sanitation surveys, water source surveys, food safety surveys, and hazardous material surveys. Air and water samples were taken to quantify the hazards and initial preventative measures were implemented. Prompt action by ADF and civilian EHOs ensured that the application of relatively simple preventative measures had a positive impact on the health of ADF and civilian personnel involved in the operation.*



# KEYNOTE PRESENTERS

**Walker Smith, Director of the Office of Global Affairs and Policy, Office of International Affairs, Environmental Protection Agency, USA**



Sponsored by Australian Government  
Department of Health and Ageing



Walker B. Smith is the Director of the Office of Global Affairs and Policy in the Office of International Affairs (OIA), United States Environmental Protection Agency (EPA). She is responsible for high-profile program issues of international significance that are multilateral in scope. She works with the executive branch of United States government, including the Departments of State, Treasury, and other federal agencies engaged in protecting the global environment and manages EPA's participation in the environmental programs of multilateral organisations, including the United Nations agencies and the Organisation of Economic Cooperation and Development.

Prior to joining OIA in 2008, Ms Smith was the Director of EPA's Office of Civil Enforcement Office for over six years. She was responsible for the civil enforcement of all of the regulatory statutes that fall within EPA's jurisdiction, including the Clean Water Act, the Clean Air Act, and statutes covering the management of wastes, pesticides, and chemicals.

Before coming to EPA, Ms Smith was an attorney with the Environmental Enforcement Section of the United States Department of Justice, where she held the positions of Principal Deputy Chief, Assistant Chief, Senior Attorney and Trial Attorney. Ms Smith is a member of the Supreme Court of the United States, the Sixth Circuit Court of Appeals and was the recipient of the Presidential Rank Award for Meritorious Service in 2007.

**Emeritus Professor Ian Lowe AO,**  
Griffith University, QLD



Ian Lowe AO is an emeritus professor at Brisbane's Griffith University, where he was previously Head of the School of Science. He directed the Commission for the Future in 1988 and chaired the advisory council that produced the first report on the state of the Australian environment in 1996.

He was named Australian Humanist of the Year in 1988 and delivered the 1991 Boyer Lectures for the Australian Broadcasting Corporation. In 2000 he received the Queensland Premier's Millennium Award for Excellence in Science and the Australian Prime Minister's Environmental Award for Outstanding Individual Achievement. He

wrote a weekly column for New Scientist for 13 years. He received the 2002 Eureka Prize for promotion of science and a Centenary Medal for communicating environmental science to the public. Ian is President of the Australian Conservation Foundation.

**Dr Roscoe Taylor, Director of Public Health, Department of Health and Human Services, TAS**



Sponsored by Tasmania  
Explore the possibilities



Roscoe is Director of Population Health in the Department of Health & Human Services in Tasmania and holds the statutory position of Director of Public Health. Previously he has worked in public health in Victoria and Queensland.

In the past he has been a member and chair of enHealth, and sat on the NHMRC's Health Advisory Committee as a member with environmental health expertise.

In Tasmania, Roscoe has been active in reforms to promote and protect public health in areas such as drinking water quality management, tobacco control, food safety, radiation health and environmental health workforce development. He has also maintained close involvement in a range of environmental health risk assessments and reported cancer cluster investigations.

Currently he is co-chairing a joint environment and health sector working group developing a national health-based methodology for ambient air quality standard setting and is also a member of the steering group overseeing the enHealth review of Environmental Health Risk Assessment in Australia.

## TECHNICAL TOURS

Thursday 12 November

### Tour 1 University of Tasmania Agricultural Farm

- 300ha commercial farm run by School of Agricultural Science, University of Tasmania in spectacular Coal Valley approx 20 minutes out of Hobart,
- Incorporates commercial crop growing activities (peas, poppies), eucalyptus trees and seeds propagation,
- Use of recycled water from Coal River Recycled Water Scheme for crop irrigation purposes,
- Environmental monitoring programs in place,
- Afternoon tea at Meadowbank Vineyard

### Tour 2 Nyrstar Hobart Smelter

Nyrstar is a leading global multi-metals business, producing significant quantities of zinc and lead as well as other products (including silver, gold, and copper). The Hobart site is a zinc smelting and alloying site and their environmental remediation work is widely recognised. The Nyrstar Zinc Works invested \$2 million to increase the stormwater collection capacity with the construction of a 12 mega-litre stormwater retention pond and a bio-treatment system. This prevents contaminated stormwater overflows in the estuary. In addition, the smelter has made progress in extending its contaminated groundwater recovery program, with the completion of drilling test bores. The industrial site's foreshore was transformed with the planting of more than 30,000 native seedlings and grasses. The aim of the revegetation program is to provide screening to assist with noise attenuation and dust emissions and to create a "green corridor" linking New Town Bay and Prince of Wales Bay with surrounding areas.

