



Environmental Health Year Book 2011-2012

A guide to understanding the business of the Environmental Health Directorate



Environmental Health Business Is

Asbestos **B**acteria **C**landestine Labs **D**ust

Event management **F**ood safety **G**iardia **H**ygiene **I**sotopes **J**ustice

Knowledge management **L**egionella **M**ould **N**anotechnology

Odour **P**ublic health planning **Q**uarantine **R**isk management

Septic tanks **T**oxicology **U**ranium mining **V**ectors

Water quality **X**-ray **Y**our health **Z**oonotic diseases

What you said about our Year Book

I would like to congratulate you on a very informative year book, it provides a wealth of information

Jane Newcomb | Manager Quality Safety and Performance| Public Health and Ambulatory Care

That is really brilliant. I am going to steal it and sell it to our crowd here.

Simon Critchley, A/Senior Director Queensland Health - Environmental Health

Thanks Jim - great idea - I've spread it round to the troops.

Chris Lease, Director Health Protection, South Australia

Awesome! You rock! Fantastic idea.

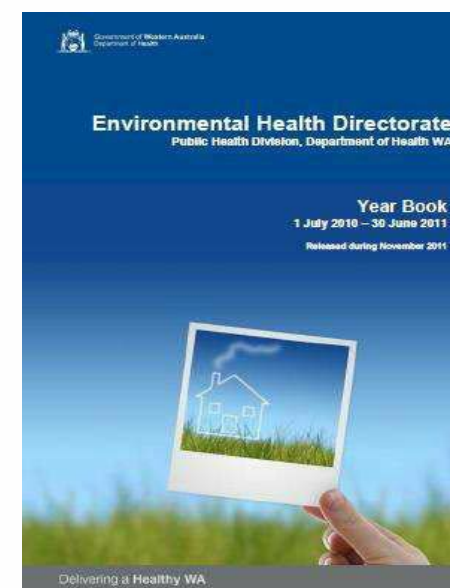
Chelsie, Personal Assistant Executive Director Public Health and Clinical Services Division

Was just having a quick read through the EH Year Book and felt I needed to send you a quick email to let you know that it's fantastic! Think it's a really great vehicle to highlight all the good things you guys do. The pics are amazing and tell most of the story. Congratulations to you and the EH Directorate on a great piece of work.

Shannon Clarkson, A/Senior Project Manager Health Infrastructure Unit, Department of Health

I am VERY IMPRESSED...it is comprehensive yet easy to read, well laid out and has a nice mix of details plus some great photos of the staff doing their job

Michael Jackson, Consultant, Department of Transport



**Thank you Everyone in the Environmental
Health Directorate for contributing to our
2011 - 2012 Year Book.**

Contents

Message from the Director	6
Operational Structure	9
Last year's scorecard	10
Our major achievements	13
What we did	15
Legislation, guidelines and publications	16
Community studies and other studies	20
Projects, programs and other health initiatives	23
Extraordinary issues	26
Rewards and recognitions	31
Compliance activities	32
Emerging threats	39
Communication	40
General business	46
Our staff	50
This years priorities	54
Looking ahead	57
Financials	59
Professional development	63
Glossary and acknowledgments	65



Message from the Director



Welcome to the second edition of the Environmental Health Directorate's Year Book.

Last year's publication set a high standard and the benchmark we set continues to be a challenge. Our Year Book provides a lot of information about our daily work and the strategic contributions we have made towards achieving targets set out in our annual work plan.

The innovative approach taken in last year's Book created a great deal of discussion amongst the groups we work with and work for. Many people were surprised to see the wide range of activities we conduct and that these extended far beyond the services they were initially interested in. The Directorate sees this in a positive light as it increases people's understanding of the context of an issue. The discussion generated about the Year Book was generally very positive, although there was also some constructive criticism which we have addressed wherever possible. Overall, we are pleased with the Year Book and the consultative processes that are generated within the team to produce the publication.

As you read through the Year Book, it is worth noting that whilst it provides good information about environmental health throughout the State, it also serves a number of other purposes.

The Year Book describes our services, but also provides a human side to our work. One of the key outcomes we wanted to achieve when the idea was originally conceived, was for the Year Book to focus on staff, what we do, how we do it and why. It is for this reason that the pictures and stories are such an important contribution.

As part of the Public Health and Clinical Services Division, our team plays an important role in achieving the Department's goals to promote and protect the health of West Australians. For our Directorate, the Year Book provides staff with the opportunity to demonstrate and observe how their work has contributed to the Department's outcomes for the year.

Initially, the Year Book was intended to be an annual report, but in reality the book extends beyond a 12 month period. It integrates all of our work group's planning processes and describes work commitments for that year. The process of contributing to the Year Book has created a framework which makes each of our work groups planning processes a critical component of the book. The quarterly reporting still requires discipline but has created an expectation to review progress and report upwardly on a regular basis and in a consistent manner. This reporting has created an opportunity for us to better understand the work we do, identify opportunities to work together and congratulate staff for achieving their outcomes.

Documenting our efforts as a state-wide service that provides risk assessment and risk management to many government and non-government agencies assists us to understand the impact of new and unplanned work on our strategic work program. In 2011, this was demonstrated through the number of projects that were started but could not be finished, mostly due to new high priority projects competing for resources. All of these aspects are beneficial in reviewing performance over the year and reflecting on where services could be provided differently.

We have received many enquiries generated through the Year Book and the process we followed when developing it. As the Director, I highly recommend this process as one way to bring together planning, monitoring and reporting as well as celebrating staff achievements. As I am writing this foreword, the Directorate is entering our third year of reporting for the Year Book and our priorities are set and we are already recording data to monitor our performance for next year's edition.

I would like to sincerely thank the project team who have acted as conduits to the work groups and work units to record and format the data for this publication. Their efforts have ensured we have the information in a timely manner to consistently produce the Year Book

Lastly, I would like to thank all the staff for their efforts which have made the Year Book a reality. This does not only refer to producing the document, but acknowledges their tremendous work on a daily basis that creates the stories which illustrates the diversity of our work.



Jim Dodds
Director
Environmental Health Directorate
Public Health and Clinical Service
Division Department of Health of Western

Our purpose
To lead in the management of environmental health risks

Our vision
Healthy people in a healthy environment

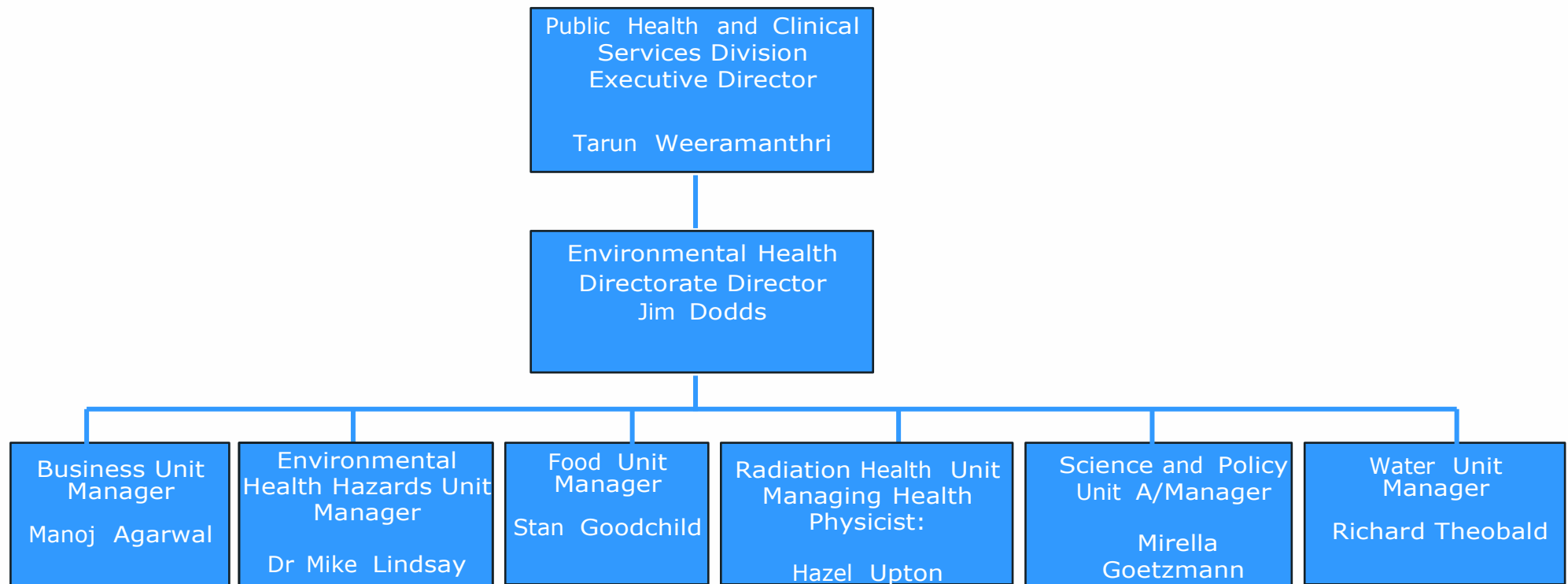
Our values
Integrity | Excellence | Fairness | Cooperation | Service



Operational structure

The Environmental Health Directorate (the Directorate) belongs within the Public Health and Clinical Services Division (PHCSD) of the Department of Health of Western Australia.

We currently employ ninety four staff from a diverse range of professional backgrounds such as Environmental Health Officers, Toxicologists, Environmental Scientists, Food Technicians, Policy Officers, Entomologists, Nutritionists, Health Physicists, Administration Officers and Record Services.






Last year's scorecard









Delivering a **Healthy WA**

Robert Mullane Program Officer (right), and Gary Tucker, Menzies Aboriginal Corporation, discuss environmental health services in the town of Menzies.


Did we achieve what we set out to?







-  Desired result delayed - goal reassessment in progress.
-  Satisfactory result – progressed but not completed.
-  We achieved our goal.

Business Unit Priorities






-  Implement a new way of managing the budget by using a budget template to provide up-to-date financial information to management and enable more efficient allocation of funds to units. This will assist in priority planning for the new financial year.
-  Implement the Directorate Communication Strategy with a focus on improving internal communication.
-  Develop a Business Continuity Plan (BCP) to manage severe disruption to services in the event of an emergency. The BCP will identify all resources necessary to continue crucial functions.
-  Review Job Description Forms (JDFs) to address identified skill gaps within the area of administrative research.
-  Review revenue for licensing fees and cost recovery processes to assist the Directorate to better recover costs associated with the issue of all licences. The review will look to improve payment options for licence holders, which will include online payment mechanisms.
-  Develop better electronic document management systems to better coordinate our indexing of electronic documents to handle the significant increases in this form of communication.

Environmental Health Hazards Unit Priorities



-  Implement recommendations arising from a review of funding for Contiguous Local Authorities Groups for health-driven mosquito management.

-  Review the Health Asbestos Regulations and preparation of drafting instructions.
-  Finalise the report into heat stress in prisons.
-  Complete water spray park guidelines for operators and Local Governments.
-  Complete guidelines on air quality levels related to bush fire smoke.
-  Complete guidelines for health aspects of dust in residential and industrial settings.
-  Develop a policy for the Directorate when requested to provide expert health input into Hearings for the State Administrative Tribunal.

Food Unit Priorities

-  Review the Food Regulations 2009 including surveillance fees and meat business enforcement agency arrangements.
-  Develop and implement the management system for the Regulatory Food Safety Auditors Framework.
-  Review options for the provision of meat inspection at domestic abattoirs in conjunction with meat business enforcement agency arrangements.
-  Complete the review of food related outbreak investigations, guidance procedures and develop a new guidance manual.
-  Complete the Guidelines for food borne disease outbreak investigation

Radiation Health Unit Priorities

-  Continue working on various aspects of the implementation of the Code of Practice on the security of Radiation sources.
-  On behalf of the Radiological Council commence a review of the training and examination for licensing for portable moisture density gauges.

Science and Policy Unit Priorities

- Develop supporting documentation to assist with the implementation of the next stages of the Public Health Bill.
- Establish a Development Assessment Panel.
- Expand the Aboriginal Environmental Health program including:
 - - Development of a statewide plan to reflect regional needs.
 - - Liaise with the Plumbers Licensing Board to effect regulatory changes required to allow non-plumbers (EH workforce) to undertake basic repairs to household plumbing.
 - - Develop a home hygiene resource.
 - - Establishing the Goldfields forum as a group reporting to the Aboriginal Health Forum.
 - - Assist with the allocation of machinery to encourage local Aboriginal recruitment.
 - - Utilise regional gatherings to identify and implement specific training needs

Water Unit Priorities

- Complete the Code of Practice for Onsite Wastewater Management, Wastewater Management Disposal, and Aerobic Treatment Units.
- Review the Harmful Algal Bloom Response Procedures.
- Develop the Recreational Waters Sanitary Inspection Database and integrate the GIS system.
- Extend GIS availability to remote workers and other Branches within the Division.
- Develop mutual recognition between the States and Territories regarding the approval of waste water disposal systems.
- Develop the Phase 1 Recycling Guidelines data management system.
- Develop a Memorandum of Understanding for Wastewater Services with Water Corporation.

Our major achievements



The West Australian used this photo of Geoff Harcombe, Senior Scientific Officer, to promote how to avoid using pesticides and how to store pesticides safely around the home.

Our major achievements

Our team had a productive year during 2011-12. Some of our highlights for the past financial year included:

Submission of the Public Health Bill to Government

A huge amount of work was undertaken in partnership with a number of agencies to finalise the Bill and accompanying material to ensure the Bill was submitted to government.

Developed and Completed a 'Memorandum of Understanding' for Waste Water Services with the Water Corporation

The first of its kind in Australia the Department of Health and Water Corporation have established a 'memorandum of understanding' for all forms of waste water disposal including biosolids.

Implemented outcomes of the Contiguous Local Authorities Group (CLAG) Review

We expanded the existing CLAG scheme to enhance mosquito management capability across WA. This included employing a full time person to manage the program who has started to implement numerous projects.

Established our Development Assessment Panel

We formed a team of experts across the Directorate to review the large volume of development proposals that require health input each week. This has streamlined our responses and will help to minimise the administration burdens associated with these types of proposals.

What we did



Mathew Lester, Manager of Aboriginal Environmental Health, helping out with the Kimberley trachoma screening program.

Legislation, guidelines and publications

We initiated and/or completed a number of reviews of legislation, guidelines and publications during the year.

Public Health Bill to Government

Over the past 12 months, we have worked closely with the Disaster Preparedness and Management Unit, Communicable Disease Control Directorate and Legal and Legislative Services to refine the Bill, now in its 17th and final draft, and have finalised the Consequential Amendments Bill. Alongside this, we wrote a Decision Regulatory Impact Statement, a requirement for new legislation, and engaged the services of Ernst and Young to provide further input on the costs and benefits associated with the Bill.

The Bill has been submitted to government to determine if it has the capacity to introduce the Bill to Parliament

"Well, the Bill is out of the building and officially on its way to the Minister and Cabinet. While there is more work to come, thank you to everybody concerned for getting to and over this critical milestone. All your efforts and those of your staff have been most appreciated."

**Dr Andy Robertson
Acting Executive Director**

Tobacco Products Control Act 2006

We initiated a review of the *Tobacco Products Control Act 2006*. A total of 69 submissions were received from community members, businesses, local government authorities, non-government organisations, sports and arts organisations, industry organisations and groups. A final report has been drafted and sent to the Minister for Health for his consideration and tabling in Parliament.

Thank you to everyone who contributed to the review.

Health advisories guide for bush fire smoke: Exposure to bush fire smoke is a fact of life in many parts of WA. So that communities and individuals can minimise their risk of harm from smoke exposure, toxicologists have developed air quality guidelines to assist emergency services to decide which health protective advisories to issue. The guidelines and associated health advisories will be in place in time for the 2012 summer bush fire season.



Asbestos management education programs We continued with our asbestos management educational programs publishing the *Summary of the Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia*. We also convened a second asbestos stakeholder forum, as a follow-up to one held three months earlier.

Requesting and providing expert evidence Expert evidence is often crucial in disputes decided before the State Administrative Tribunal. Requests for expert evidence from officers from our Directorate increased substantially in recent years, and we identified a need to develop the [Guideline for requesting expert evidence](#) to explain the role and responsibilities faced by staff when asked to provide expert evidence and act as expert witnesses. This guide is also useful for anyone requiring expert evidence from the Department.

Faecal accident in public swimming pool guide We published the [Response to a faecal accident in a public swimming pool in WA guideline](#) which provides useful information and processes for local governments and public pool operators on how to manage an incident in a public pool.

Guidelines for water-park spray grounds The [Guideline on the construction and operation of water-park spray grounds](#) was completed and will be incorporated into the *Code of Practice for the Design, Construction, Operation, Management and Maintenance of Aquatic Facilities*.

Health (pesticides) competencies for the control of feral animals

We were represented on a working party that included representatives from TAFE, industry stakeholders and the three regulatory agencies; Department of Agriculture, Food WA (DAFWA) and Department of Environment & Conservation, to develop a new certification course for controlling feral animals. The course consists of 16 units of competency and is now available through the CY O'Connor Institute.

Statewide events calendar

To assist in identifying potential issues that may result from multiple events such as concerts being organised on the same day, particularly in smaller regional areas, we launched an online [statewide events calendar](#), which allows local governments and event organisers to input information on their event [calendar](#).

Food Act report

The first [Food Act report](#) on the performance of the food regulatory functions of enforcement agencies for the period October 2009 to June 2010 was completed. With a 100% response from enforcement agencies, the Director General congratulated all parties for working diligently to provide assurances on the safety of food available for sale in the local marketplace.



Compliance and enforcement policy

"I congratulate all parties for work diligently to provide assurances on the safety of food available for sale in the local marketplace".

Dr Kim Snowball
Director General Department of Health

Our Compliance and Enforcement (WA Food Regulation) Policy was revised to incorporate a number of changes to improve "housekeeping" and provide clarity in a range of areas related to the food regulatory enforcement activities for food business which the Directorate monitors.

Auditing framework

The Management of Regulatory Food Safety Audit Policy was released to provide guidance on the implementation of Part 8 – Auditing of the *Food Act 2008* by enforcement agencies and regulatory food safety auditors.

The introduction of the Audit Policy has brought with it process changes in how food safety is managed and monitored for compliance with food laws, for certain types of food businesses. The commitment demonstrated by enforcement agencies, auditors and food businesses in their efforts to implement these changes has been to their credit.

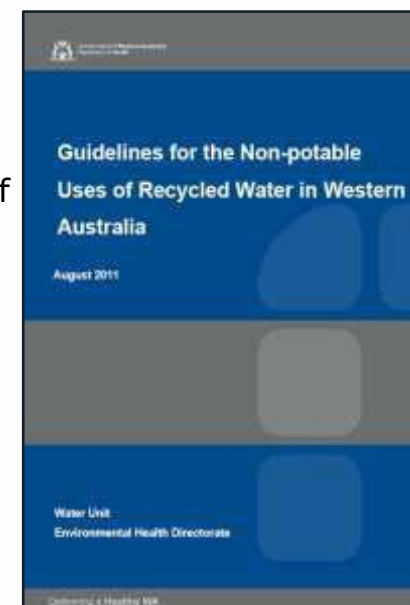
Outbreak investigation guidelines

We revised the Guidelines for the Investigation of food-borne disease outbreak to assist Food Act authorised officers to complete thorough environmental health investigations for food-borne disease outbreaks. The Guidelines provide step-by-step guidance on the investigation process from notification of a known or suspected food-borne disease case, the investigation process and implementation of preventative measures.

Recycled water guidelines

We released The Guidelines for Non-potable Uses of Recycled Water in Western Australia 2011

designed to support the best use of all forms of recycled water in a sustainable manner. The Guidelines assist planners, designers, developers and local government in the areas of development, construction, installation, approval, operation, monitoring and auditing with the ultimate aim of establishing safe and sustainable reuse of waste water.



Government sewerage policy

A review of both the *Government Sewerage Policy – Perth Metropolitan Region, 1981*, and *draft Country Sewerage Policy, 2002* was undertaken. The review committee comprised of representatives from the Department, Department of Planning, Department of Environment and Conservation, Department of Water, and the Water Corporation. The purpose of the review was to combine,

streamline and modernise the existing two policies and yet still maintain the basic intent of promoting sewer connection as the most efficient, socially equitable and safe method of disposing of wastewater. A draft single Sewage Policy was published for public comment and comments are being processed in preparation for a final Policy document.

Guidance note for greywater diversion devices We promote the safe use of greywater for sub-surface garden irrigation. The [Greywater Diversion Devices \(GDD\)](#) fact sheet provides basic information for homeowners on the types of GDD, the installation requirements, how to safely use a GDD and how to identify WaterMark certified GDDs by looking for the WaterMark logo.



Purple drip irrigation lines are used to indicate greywater reuse in residential gardens.

Guidance note for wash down bays

We worked with WorkSafe to prepare a [Guidance note for wash down facilities using recycled water](#) to outline health and safety requirements on the reuse of treated water from wash down facilities that do not contain sewage. The note provides best management practises, include aspects to consider during the planning and commissioning of the facilities and benchmark water quality requirements.

Scientific Publications

Vally, H., Peel, M., Spiker, S., Dowse, G.K., Cameron, S., Codde, J. and Lindsay, M.D.A. (2012) Use of Geographic Information Systems to describe the relationship between the risk of Ross River virus infection and proximity to the Leschenault Estuary in the south-west of Western Australia. *Australian & New Zealand Journal of Public Health*, 36: 229-235.

Community studies and other surveys

We continued to contribute towards the health research needs for the state by participating in a number of state wide surveys and community studies.

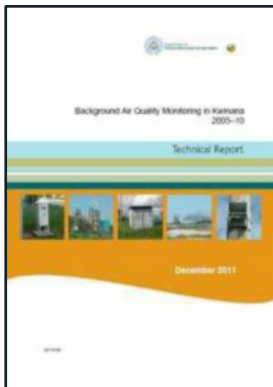
Survey of local government's experience with asbestos incidents

We wanted to determine the breadth of poor handling practice related to asbestos across WA so we initiated a survey of State and Local Government regulators. The survey findings indicated that there were numerous incidents across WA such as poor demolition, poor asbestos removal practice and illegal dumping. The report highlights a number of recommendations to address these problems.

Kwinana background air quality study

Toxicologists assisted the Department of Environment & Conservation to publish the [Background Air Quality Monitoring in Kwinana 2005-10 Technical Report](#). The study began in 2005 to assess ambient concentrations of a class of pollutants known as 'air toxics' in the Perth metropolitan and selected regional areas. The study was conducted in three phases—2005-06, 2007-08 and 2009-10.

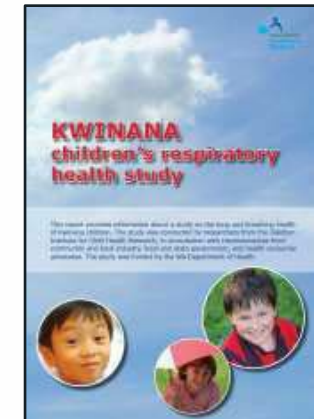
The level of 'air toxics' recorded during the three



phases were similar to those found elsewhere in the Perth metropolitan area. A new phase to study ammonia and volatile organic compounds is scheduled to begin in the latter part of 2012.

Child Health Study Kwinana

Toxicologists participated in advising the [Kwinana child health study](#). The study involved nearly 600 primary school children from the Kwinana area who were tested for lung function and allergy. The results were compared to children living in other areas of Perth. The study found that neither breathing symptoms nor lung function was worse in Kwinana children compared to other Perth children.



Tobacco retailer compliance surveys

Two [Tobacco Retailer Compliance Surveys](#) were undertaken in Perth and Bunbury to gather data on the likelihood of young people under the age of 18 being sold tobacco products by registered tobacco retailers if the opportunity to commit the offence was presented. The findings of the survey will assist us design a range of strategies to prevent uptake of smoking by young people.



North-west mosquito surveillance activities We travelled from Broome to Kununurra with staff from the Arbovirus Research and Surveillance Laboratory at the UWA to conduct annual mosquito trapping following the wet season. We wanted to document patterns in mosquito species composition, abundance and to detect virus activity.



Dr Mike Lindsay, Manager Environmental Health Hazards Unit setting mosquito traps in the North-west

Results allow staff to model changes in virus behaviour and occurrence with associated weather and other environmental variables. It is hoped that the research will allow us to better predict virus activity across the north and provide an early warning system in future years to alert the public of the risk of these diseases.



Water Unit and Swan River Trust staff collecting water samples in the Upper Swan River

Study on bacterial water quality in the Upper Swan River

Over the years our environmental bacterial water quality monitoring program has detected high bacterial levels around popular recreational sites in parts of the Upper Swan River. To gain a better understanding we partnered with the Swan River Trust and the City of Swan to monitor 20 sites surrounding Middle Swan Reserve from Blackadder Creek to Ellen Brook, including tributaries, on five occasions. The findings indicated that rainfall was a significant contributor to poor water quality and confirmed that people should avoid swimming for 2-3 days following heavy rainfall, especially at sites adjacent to tributaries. One initiative following this study is the likely installation of health warning signs at popular City of Swan swimming sites, advising people to avoid swimming and other water activities following rainfall.

Egg-based sauces and salmonella survey

We conducted a follow-up survey to a similar survey carried out in 2010, which found no evidence of risk of Salmonella contamination from egg-based sauces made at small to medium food businesses. Eleven local government authorities participated, collecting 50 samples from 30 food businesses.

Chemical residues in local and imported fresh fruit and vegetables

This on-going, annual survey involves the chemical analyses of select fruit and vegetable samples to monitor the level of pesticides found at the retail level. Sixteen local government authorities participated, with 202 samples analysed, each tested for the presence of 71 chemicals.

Labelling of alcoholic beverages

This survey was undertaken to assess and identify alcoholic beverages sold from liquor outlets, which did not have the required information on the product label.

Microbiological quality of sushi, sashimi and fresh Vietnamese spring rolls, meat and custard products made by bakeries and sliced deli meats

Microbiological analysis of these ready-to-eat foods was conducted to provide an indication of the level of safe food hygiene and handling practices at the food outlets.

Gluten-free claims in food

A range of packaged food labelled with a 'gluten-free' claim were analysed for the presence of gluten to assess the accuracy of the claim being made.

Undeclared allergens in food

A range of packaged foods which did not declare a food allergen were analysed for the presence of common food allergens to provide an indication of whether inadequate labelling has occurred.



Projects, programs and other health initiatives

We coordinated or were involved in a number of state and national projects, programs and other health initiatives.

Contiguous Local Authorities Group review We coordinate surveillance and management of mosquitoes of public health significance across WA. The program supports Local Government mosquito management through the CLAG funding scheme. A review of the scheme identified the need to expand CLAG funding to support further Local Governments.

We employed an additional staff member to enhance our communication efforts and provide extra support and expertise. A number of projects have since been identified to enhance mosquito management across WA and will be implemented over the coming years.

Development Assessment Panel (DAP) We are regularly requested to review a large number of development applications proposed for WA for potential health impacts.

Many State and Local Government agencies recognise the importance of considering human and environmental health during planning which we like to attribute to our continued awareness-raising of

'health impact assessment' and 'public health assessments'. To manage this increased demand we created the DAP to provide experts from various Environmental Health program areas the opportunity to comment on each proposal.

The weekly DAP meetings allow staff to screen large quantities of documentation to determine if further assessment is required. We are currently working through a few teething problems which will look to streamline the process, minimise the administrative burden and update information for proponents.



Heat stress meter used to monitor temperatures in the prison cells as part of our heat stress in prisons study

Heat stress report in prisons

A report on heat stress in prisons was submitted to the Office of the Inspector for Custodial Services which outlined the potential for and the impact of high temperature on the Roebourne Prison population.

The project involved partnering with the Department of Corrective Services and inspecting the prison. The *“Report of an Announced Inspection of the Roebourne Regional Prison”* identified a number of health considerations and recommended the installation of suitable climatic controls as well as future design features and more suitable geographical locations for prisons in the Pilbara region.

Chewing tobacco prosecutions

We worked with Customs to jointly investigate the sale of illegal chewing tobacco, which was permanently banned in Australia in 1991.

Customs seized 70 kg of chewing tobacco before it reach a Perth supermarket, with the owner concealing the product as red seaweed to avoid excise. A search of the supermarket found a further 2 kg of the tobacco product which was seized, and the owner is now facing prosecution.

Goldfields Aboriginal Environmental Health forum

We established a new Aboriginal Environmental Health forum in the Goldfields health region to complement those in the Mid West and the Pilbara/Kimberley. These forums bring together practitioners, contractors, community representatives, government agencies and non-government organisations – all of whose activities affect the quality of the living environments in remote communities. Each forum aids in reporting to the regional Aboriginal Health Planning Forums, to showcase work in preventing health risks, with the outcomes impacting on the capacity of primary health care and Closing the Gap in health disparity.



Attendees at the inaugural Goldfields Aboriginal Environmental Health Forum – representatives from Department of Housing, Aboriginal Medical Services, local governments, Population Health, Aboriginal Health Division and the Directorate.

Review of Food Labelling Law and Policy (the *Labelling Logic* Report)

We coordinated the development of an inter-departmental WA Government position on the sixty-one recommendations of the Review of Food Labelling Law and Policy (*Labelling Logic* report). To do this, a collaborative approach was taken and input sought from a number of State government departments. A submission was made to Cabinet advocating a collective WA Government position on the *Labelling Logic* report. Cabinet's endorsement enabled the Minister for Health to reflect the views of the State Government during national deliberations for a 'whole of government' response. In December 2011, the COAG Legislative and Governance Forum on Food Regulation (convening as the Australia New Zealand Food Regulation Ministerial Council) responded to the *Labelling Logic* report and this is available on the Food Labelling Review website www.foodlabellingreview.gov.au.



Extraordinary or major issues

During the year we had to respond to a number of unplanned events requiring our expertise to assist in managing their environmental health implications.

Ban on Kronic

Synthetic cannabis also known as Kronic was rife in the community during 2011. We had to investigate and work with Customs, WA Police and the Department's Pharmaceutical Services to make Kronic a prohibited substance under schedule 9 of the *Poisons Act 1963*.

A month prior to the prohibition, Customs advised our Directorate that 6kg of Kronic was intercepted at the Perth Airport from New Zealand destined for Collie. Under the Tobacco Control Act tobacco products



Kronic seized by our staff

prepared for smoking that contain a herb or other plant matter, whether or not the product also contains tobacco, are prohibited. Kronic is derived of herbs sprayed with synthetic chemicals making it a tobacco product.

1265 packets of Kronic were seized, with a street value of approximately \$63000. The Kronic was analysed by the Chem Centre and confirmed as synthetic cannabis and handed over to the Organised Crime Squad of the WA Police.

Margaret River bushfires

Following the bush fires that occurred in Margaret River we were requested to assist the Shire of Augusta/Margaret River in their response and recovery effort. Two officers provided assistance with assessing the extent of contamination, communicating with residents and helping to finalise the scope of works for clean up and remediation.

The main problems encountered were damaged effluent disposal systems, particularly Aerobic Treatment Unit's (ATU's), contaminated rainwater tanks, asbestos contamination and food disposal concerns.

Air monitoring (post fire and during clean up of sites) did not indicate asbestos fibres were being released from burnt asbestos cement materials (ACM).

These findings were reassuring and consistent with monitoring performed after other bush fires in Victoria (Black Saturday) and Kelmscott/Roleystone. Further work is now being undertaken to better understand at what point if any, ACM presents a risk from the release of fibres.



Geoff Harcombe, Senior Scientific Officer, inspecting a house destroyed in the bush fires.

Commonwealth Heads of Government Meeting (CHOGM)

Numerous staff were involved in the Department's CHOGM team to assist with health coordination of numerous high security events held during the week. This included liaising with local governments on food safety issues, public events management and emergency management. Local government EHOs had significant input into CHOGM preparations, and this valuable assistance is gratefully acknowledged.

Pesticide fire in Esperance

Our on call duty officer was advised by the Department of Environment & Conservation (DEC) of a chemical fire on an Esperance farm. Approximately 8 tonnes of non solvent based herbicides were destroyed. We worked with the local government officers to ensure water sampling was organised of nearby rainwater tanks, the only potable water supply, to establish pesticide levels. The burnt shed and contaminated soil were removed to a suitable disposal site.

Agricultural spray drift incidents

Notification was received of an alleged pesticide spray drift incident involving the soil fumigant Metham Sodium from a market garden in the subdivision of Pearsall, City of Wanneroo. Eleven people were reported as having experienced respiratory irritation with one person hospitalised. A number of residents self evacuated to a nearby park.



A further incident was also reported in the Karnup area within the City of Rockingham. One person was reported as suffering similar respiratory symptoms. These two incidents highlight the need for a state wide policy on land use planning where residential land encroaches on adjacent agricultural land. This situation creates the potential for spray drift to impact on health of nearby residents. The photos below highlight the potential for land use conflict



New residential developments encroaching on existing market gardens have the potential to create land use conflict

Mercury in Kalgoorlie

Concerns had been expressed by media on public exposure to mercury in the vicinity of industrial facilities. Toxicologists assessed the conditions under which the facilities of concern operated and determined that public exposure to mercury was negligible.

***Salmonella Typhimurium* PFGE**

We undertook a large investigation relating to a significant increase of food-borne illness in humans associated with *Salmonella* Typhimurium pulsed field gel electrophoresis (PFGE) type 39. The investigation has involved considerable communication with the poultry industry which included assessment of the introduction of Standard 4.2.2 - Primary Production and Processing Standard for Poultry Meat, of the *Australia New Zealand Food Standards Code*.

Animal welfare

In March 2012, we assisted the Department of Agriculture and Food in reviewing animal welfare issues at a number of abattoirs across the state. Under the *Food Act 2008*, the Department is the controlling authority for domestic abattoirs. We routinely assess abattoirs against the relevant Australian Standards related to meat, which are the only legislated standards for animal welfare in abattoirs in Western Australia. The review determined there was no evidence of adverse animal welfare issues.

State Administrative Tribunal (SAT)

Our toxicologists provided expert evidence at a number of SAT hearings including:

Wattleup land development

Case: against a proposed residential land development within the proposed Kwinana industrial buffer.

Outcome: The SAT found that the health evidence provided warranted refusal of the development until adequate air quality monitoring data acceptable to the Directorate was

undertaken by the developer. Air quality monitoring commenced in the first half of 2012 and with conclude in 2013.

Erindale Grove asbestos and residential development

Case: A mediation hearing regarding the presence of asbestos in a residential development.

Outcome: Advice from our toxicologists and the Department Environment & Conservation enabled the mediation process to progress to site assessment and clearance.

Recycling facility

Case: A mediation hearing associated with possible asbestos contamination of product from demolition material recycling activities.

Outcome: A program of management measures to prevent public risk from possible asbestos exposure was agreed and is presently being put into place.

Radiological incidents

The Radiological Council receives reports of all incidents involving radiation. While these incidents rarely pose major health risks, their reporting is encouraged to enable thorough investigation and minimising risks of recurrence. In the 2011 calendar year, Council was notified of 16 incidents – 12 medical and 4 industrial. Our staff are responsible for following up on these concerns. Information on these incidents is published within the Annual report of the [Radiological Council](#).

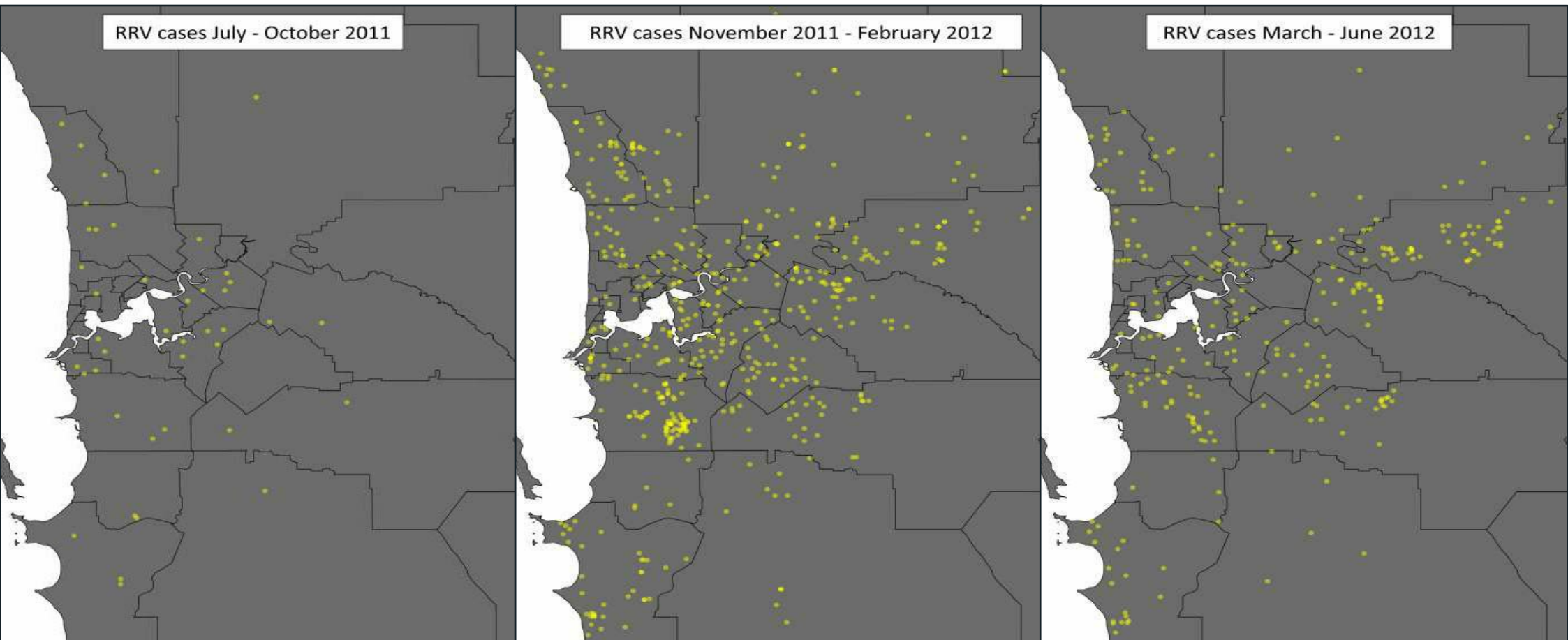


We are now modelling the occurrence of Ross River virus and proximity to waterways as a means for better urban planning in the future.

Mosquito outbreak in the Perth Metropolitan

Region: La Niña weather conditions (increased size and frequency of high tides, increased rainfall and above average temperatures) have led to a rise in the number of mosquitoes seen around Perth during the past year. Predicted weather patterns prompted our team to issue our first mosquito warning in August 2011, and a further seven media statements were released throughout the summer, warning residents to take precautions against mosquito bites.

However as the summer progressed a large number of Ross River virus cases were reported to authorities, jumping to over 700 cases for the metropolitan area alone. The majority of cases were reported from outer Local Government areas of Perth, close to waterways and bush lands.



Mapping the incidents of Ross River virus cases across the Perth Metropolitan areas for 2011-2012 will allow us to gain a better understanding of the activity and spread of the virus in outbreak years.

Rewards and recognition

It's always nice when people take the time to show their gratitude for the state wide environmental health services we provide.

Asbestos management

David Peckitt, Senior Scientific Officer, was thanked for his assistance and expertise provided to the City of Melville to help manage a difficult asbestos problem. Email extract:

Hi Jim and Michael

Just to advise on a positive note the assistance given by Dave Peckitt in a difficult asbestos issue involving a "conman" asbestos roof cleaner/sealer. It involves contamination of several properties.

It seems we will resolve the matter in a reasonable timeframe thanks to Dave's on site assistance, suggestions and contacts of consultant to get things going.

Most appreciated.

John Burton

Coordinator Environmental Health

Aboriginal Environmental Health

Rob Mullane from our Aboriginal Environmental Health program was recognised for the outstanding support he provided to the Wirrimanu Aboriginal Community. Letter provided on the opposite page.



Compliance activities

Tobacco control compliance activities for 2011-2012: Enforcement of the *Tobacco Products Control Act 2006* includes a State-wide compliance program to educate licensees, conducting store visits and audits of tobacco sellers. The Tobacco Control team also investigate complaints and carry out a range of enforcement activities where necessary, as well as provide training to WA Police cadets, Environmental Health Officers and other groups.

Activity	Number
Store Audits	459
Complaints Investigated	51
Infringements Written	7
Warnings Issued	34
Prosecutions	0
Training Sessions Conducted	52

Tobacco Licensing Survey

A survey was conducted on services currently provided to Tobacco Licensees. A total of 1796 surveys were sent between July 2011 - November 2011, which represents 2429 (62%) of the 3914 active tobacco licences. 878 responses were received and used to guide future services.

Translation of Tobacco Licensing information into more languages

Two licensing and four compliance documents have been translated into 16 languages to assist Licensees and other persons to understand the *Tobacco Products Control Act 2006*. Future translations are planned.

Local laws processed

Local government makes health local laws to protect public health within its district and to facilitate the discharge of the local government's duties under the *Health Act 1911*. We assist local governments make and/or amend health local laws.

Month	Number of local laws processed			
	2009	2010	2011	2012
January	0	0	2	3
February	1	1	4	1
March	2	0	5	2
April	0	0	2	1
May	0	2	3	2
June	1	2	0	
July	4	0	0	
August	3	1	0	
September	1	3	3	
October	3	1	0	
November	0	1	1	
December	0	0	1	

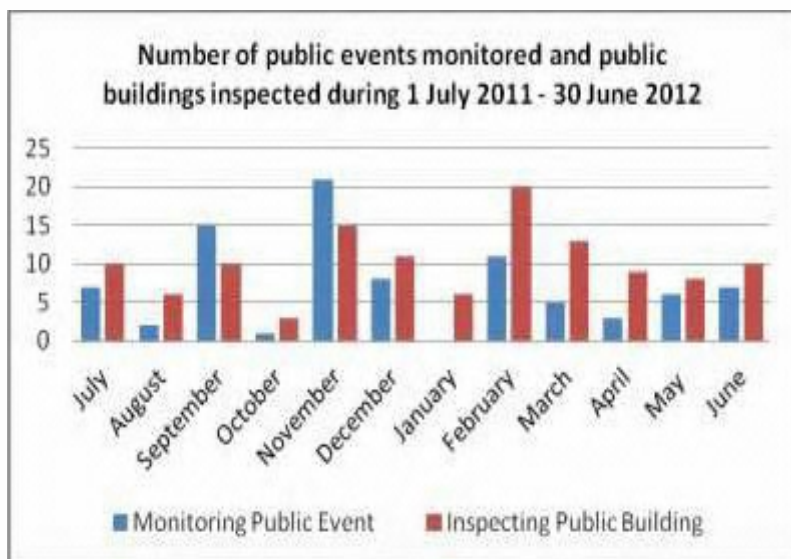
Public events and mass gatherings

Staff attended **86** public events over the past year and responded to **121** public building issues.

Public building issues include assessing plans, on-site inspections and preparing advice, inspecting Group One aquatic facilities and inter-active Spray Parks.

Public event activities include monitoring public events planning, monitoring events and attending post event debriefs and providing advice to other government agencies.

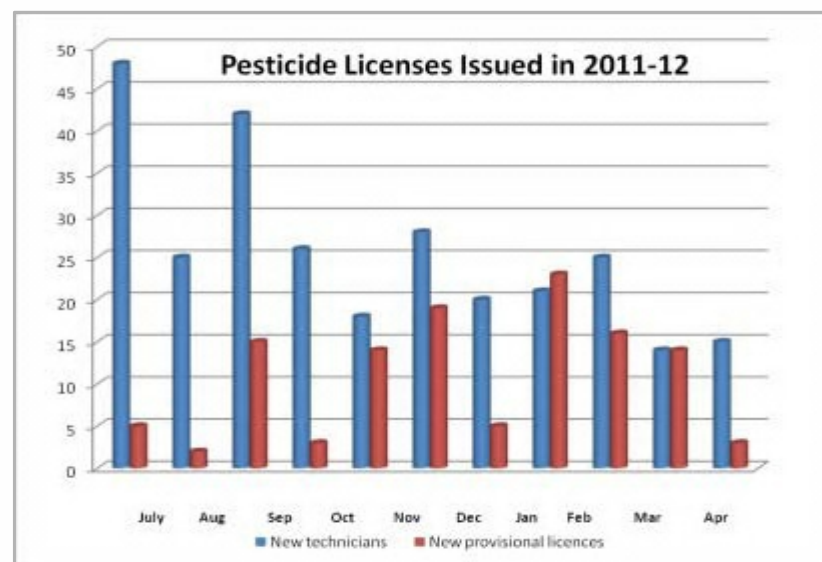
The following graph shows a slight seasonal trend for public events, with a gradual increase noted in September and November 2011. The diminishing number of public events may reflect expenses incurred by event organisers. The graph shows a peak in aquatic centres inspected during February, the peak of summer.



During the coming year government initiatives and infrastructure programs including the Perth Arena, the new sporting stadium construction at Perth Oval, and the redevelopment of the raceway in Wanneroo are a few of the projects in which officers of the Directorate will be involved in pesticide safety licensing activities.

The licensing of Pest Management Technicians is a year-round activity. The below graph shows the numbers of new licences issued in the past financial year (**282**), and new provisional licences (**119**). There is a provisional period for all persons entering the industry.

We noted an increase in the numbers of technicians adding the endorsement of fumigation to the licence. This is in response to significant market demand for the fumigation of equipment and commodities, which have been imported for the mining and gas industry and quarantine requirements (Barrow Island).



Contaminated sites management Our toxicologists continued to assist the Department of Environment & Conservation to classify **553** sites in accordance with the *Contaminated Sites Act 2003*. This increased by 14 assessments completed the previous year (539).



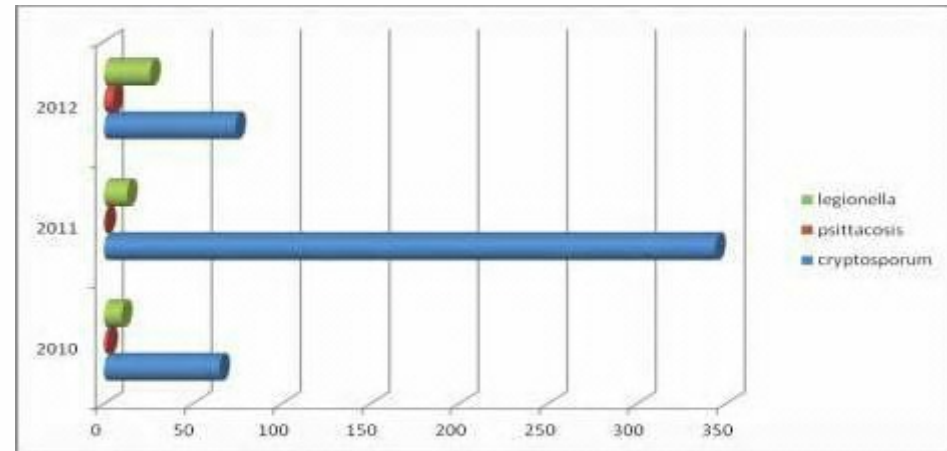
Asbestos contamination detected during a site investigation

Disease notifications follow-up investigations

We monitor and follow up on cases of cryptosporidium, Legionella and Psittacosis notified to the Communicable Disease Control Directorate (CDCD).

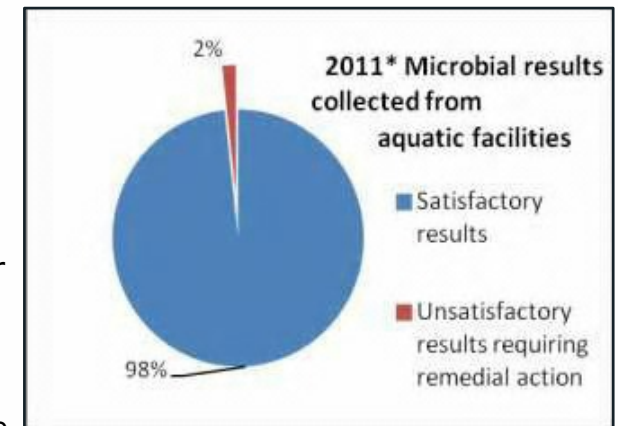
During the 2011-2012 financial year there were seven clusters of Cryptosporidium. While this type of notification is usually associated with recreational waters, there had not been any identified incidence in public pools since the summer of 2007. All clusters were investigated with two requiring further intervention, and one of these cases involved Local Government assistance.

Cases of Legionella, Psittacosis and Cryptosporium notified during 2010 – 2012



Monitoring microbiological water quality of aquatic facilities

We help to administer the *Health (Aquatic Facilities) Regulations 2007* which require the collection of water samples from aquatic facilities to test for microbiological indicators (Pseudomonas Aeroginosa, Thermophilic Amoebae and Thermophilic Naegleria). Where an unsatisfactory result is detected the local government is required to notify the manager of the facility to initiate decontamination processes such as super-chlorination to ensure the water is safe to swim. In some cases

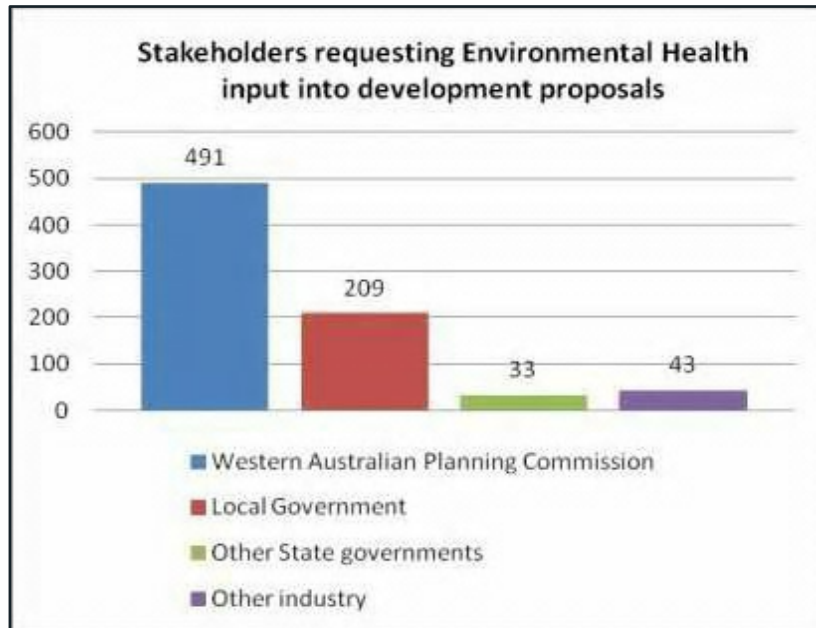


Development assessments

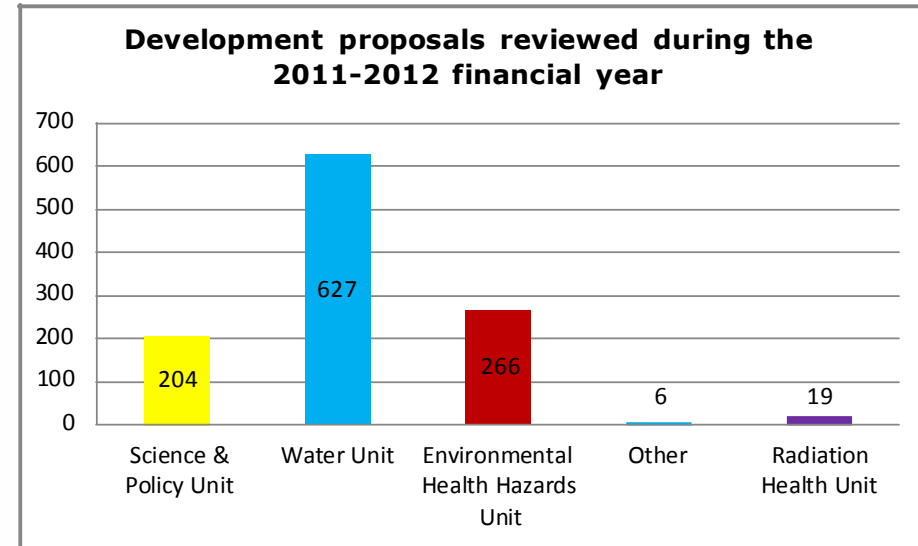
The Directorate receives a large number of development proposals each year that require health input. The following statistics show the number of development applications received during the 2011-12 financial year.

There are two main types of developments received from numerous proponents including:

1. Subdivision applications (WAPC) and
2. Others including planning scheme amendment, mining developments etc (local Government and other agencies).



The majority of the proposals are reviewed by our Water Unit for subdivision approvals.



Aboriginal health service contracts

In 2011-2012, the WA Aboriginal Health Program managed and awarded a total of thirty contracts and ten grants. The value of these contracts and grants was approximately \$5.8 million. The Program provides funding and support for the delivery of essential and basic environmental health services to regional and remote Aboriginal communities that do not have access to mainstream services that are normally available to those living in larger metro and regional centres.

Organisations that received funding included 6 regional Local Government Authorities, 6 Aboriginal Medical Services and more than 14 Non-government Organisations located in the Midwest, Goldfields, Pilbara and Kimberley regions. In delivering these services, the Program also provides training and employment opportunities for up to 55-60 Aboriginal people living and working in remote WA Aboriginal communities.

Food premises samples

Samples collected as part of independent assessment of food safety issues and enteric disease investigations, in conjunction with local government are detailed in the following table. We collected 1128 less samples than the previous year.

Food premises samples 2011-2012	
Sample program	Number samples
Animal feed monitoring program	27
Carcase swabs (Abattoir monitoring)	137
Carcass excision	126
Dairy products	387
DOH miscellaneous samples	10
Food complaint	6
Food poisoning	7
Outbreak investigation	370
Poultry monitoring program	47
Shellfish monitoring (Local)	38
Smallgoods equipment	450
Smallgoods products	349
Total	1954
2010-2011 Total Samples Collected	3082

Assessment of food business premises

The Department is the enforcement agency under the *Food Regulations 2009* for a food business located in public hospitals, primary production of dairy and seafood, or not within a local government district. The Department also audits food businesses processing animal products for human consumption under the *Australian New Zealand Food Standards Code*. The table below indicates the number of assessments undertaken by Food Unit officers.

Assessment of food business premises 2011-2012		
Type of premises	Number premises	Number of assessments
Meat premises	138	209
Dairy farms	174	154
Dairy processors	47	63
Vulnerable persons	88	42
Rottnest/Kings Park/Hillarys	25	55
TOTAL	472	523
2010 – 11 Total	482	540

Radiation Safety Act – Regulatory Compliance Programs

The Radiation Health Unit plays an administrative, supervisory and auditing role in the Radiological Council’s compliance testing program for medical and dental x-ray equipment which began in 1997. This program assists in maintaining surveillance of the rapidly growing use of x-ray equipment in the State, and helps to ensure that radiation doses to patients are kept acceptably low.

The program requires annual testing of all medical diagnostic x-ray equipment and triennial testing of all dental x-ray equipment. The testing is the responsibility of the equipment owners and is delivered by a variety of licensed providers from the public and private sectors. Equipment must not be used for human diagnostic purposes unless it has a current certificate of compliance, a certificate of conditional compliance or an exemption from compliance. The number of compliance tests processed by the Unit during the past five financial is as follows:-

Medical Compliance Tests					
Financial year	2011-2012	2010-2011	2009-2010	2008-2009	2007-2008
Number of tests processed	1208	1142	1214	991	980

A compliance testing program for fixed radiation gauges commenced in 1999. The program requires that fixed radiation gauges are not used unless they have a current certificate of compliance. The frequency of testing fixed gauges is triennially. The number of fixed radiation gauge compliance tests processed by the Unit during the past five financial years is as follows:-

Fixed Gauge Compliance Tests					
Financial year	2011-2012	2010-2011	2009-2010	2008-2009	2007-2008
Number of tests processed	749	336	746	663	447

Radiation Safety Act- Inspections

Unit officers inspect radiation-producing equipment used in medicine, industry, research and education for compliance with the regulations under the Act. The officers also inspect premises where radiation producing equipment is used or that are involved in the use of radioactive substances, to ensure compliance with structural protection and personal radiation protection requirements. The total number of inspections and outcomes are reported as a standard item during each Radiological Council meeting.

Radiation Safety Act – Registration and Licensing

Radiation Health provides administrative and scientific support to the Radiological Council in applying the Radiation Safety Act. Registration and licensing are the principal means by which the use of radiation is regulated. Radiation-producing devices, radioactive substances and associated premises are required to be registered, and individual radiation users must either be licensed or exempted. The following licences and registrations were held under the Act as at 30 June 2012:-

Radioactive Substances licences and registrations during

	X-ray and/or Electronic Products	Radioactive Substances	Total
Licences	4350	1998	6348
Registrations	1563	359	1922
Total	5913	2357	8270

The number of devices registered at 30 June 2012 is as

Type of Devices	Number of Devices
X-ray	4122
Electronic Products	832
Radioactive Substances	5589
Total	10543

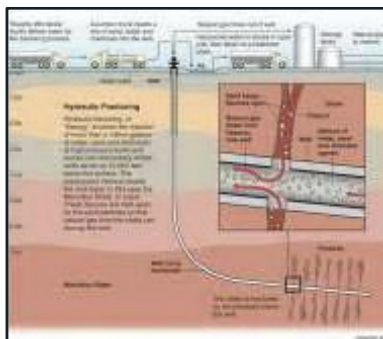


Emerging threats

Last year we identified three emerging threats to WA. We responded by gaining a better understanding of these potential threats and initiated management action where appropriated



Wind farms: We examined the current evidence on the impact of wind farms on public health, and current management strategies in Western Australia for wind farm developments following health concerns raised in some parts of Australia. To assist planners and local governments address these concerns we released the [wind farms](#) information guide, and will continue to monitor any changes in available evidence.



Unconventional onshore gas (previously known as fracking): In light of environmental and public health concerns linked to mining of coal seam gas in Queensland and New South Wales, the Directorate has responded to newly proposed legislation governing these types of mining practices in WA. A [fact sheet](#) was developed to explain what underground 'fracking' is and how concerns about potential threats to drinking water supplies will be addressed. We are now engaged with other regulatory bodies in the development of an Unconventional Onshore Gas Framework through an Inter-Agency Working Group.



Cleaning-up Clandestine Laboratories: We worked with other agencies to develop the draft [Interim Guidelines for notification and risk management after detection of a clandestine drug laboratory](#) to help Local Government manage clean-up of chemical residues that may remain in buildings after a clandestine drug laboratory (clan lab) has been "busted". The incidence of clandestine drug laboratory (clan lab) detections in Western Australia has increased substantially in recent years. The guidelines are practical and adapted to local needs. We have commenced a series of education and training sessions to aid with their implementation.

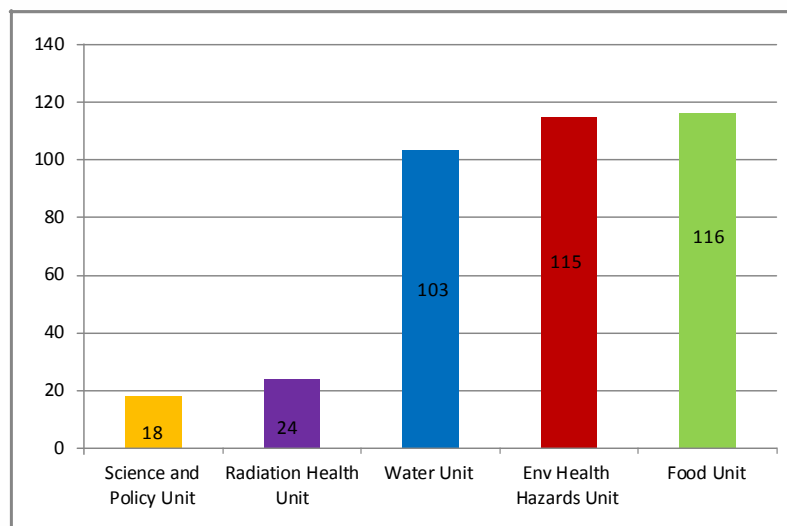
Communication



Mirella Goetzmann, Toxicologist, answering queries on air quality and public health at the DEC air quality forum

Ministerial correspondence

We assisted the Minister to respond to **376** community environmental health concerns. This was 82 less than the previous year



Ministerial topics of most public concern

Unit	Topic of concern
Food Unit	Nutrition and health related claims – nutrition, labelling
Env Health Hazards Unit	Asbestos contamination, air quality
Radiation Health	Laser therapy
Science and Policy	Smoking laws
Water Unit	Opposition to fluoridation of Perth's drinking water

Freedom of Information (FOI) requests

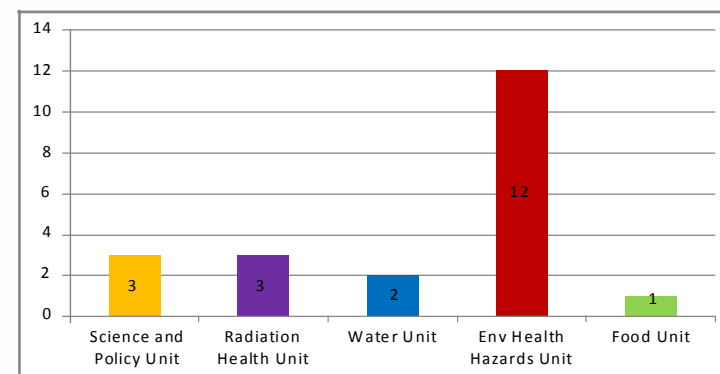
We assisted Corporate Governance to respond to a total of **19** FOI's.

Ministerial briefing notes / Parliamentary questions

As part of the parliamentary process, we provided **48** briefings to the Minister when requested to update on a range topical environmental health issues.

Unit	Number
Food Unit	13
Env Health Hazards Unit	14
Radiation Health	1
Science and Policy	10
Water Unit	10

We're also required to respond immediately to the Minister following questions posed during parliamentary sittings, with a total of **21** parliamentary questions actioned.



Cabinet comments / cabinet submissions

We responded to **14** urgent cabinet comments and submitted 2 cabinet submissions.

Our website

The public health website www.public.health.wa.gov.au is an important communication and public health promotion tool, which is why we continue to invest time in developing extensive resources designed for the web.

This year we have launched two online forms including the Food Act Reporting Form and the events registration form, which are useful tools for automating data entry and enhance record keeping.

Food Act 2008 Section 121 Reporting Requirements

Fields marked with an asterisk (*) are required

Authorised Officers

Note: An authorised officer working in food safety one day a week is considered to be 0.2FTE.

Delegated Authority to undertake appointments (to select more than one option press Ctrl and highlight options): *

- Council
- CEO
- PEHO
- Other

The number of full time equivalent (FTE) authorised officers working in food safety: *

The number of full time equivalent (FTE) authorised officers assisting in working in food safety: *

The qualifications of authorised officers - EHO Degree: *

The qualifications of authorised officers - Audit Competencies: *

The new online Food Act Reporting Form that automates the data for staff

Environmental Health newsletter

The newsletter continues to run quarterly filled with informative stories about the projects and activities we're involved in.

Envirohealth list server

We have 648 members subscribed to our "Envirohealth list server," our electronic email notification system.

**Please subscribe to the list server
by emailing
envirohealth@list.bs.wa.gov.au
with 'subscribe' in the subject line**

Media releases

From time to time we need to issue media releases across the state to advise or remind members of the community of potential public health risks they need to be extra vigilant about. In the last financial year alone we issued **19** media releases on a range of environmental health related topics. These are outlined in the table below.

Media Release Topic	Date of issue
Mosquito-borne disease risk continues in the Kimberley and Pilbara regions	08/08/2011
Asbestos management review issues paper	12/08/2011
Shellfish warning for the Peel-Harvey Estuary	22/08/2011
Swimming warning for the Upper Swan River	26/08/2011
Health warning for recreational anglers: Woodman Point	05/09/2011
Ross River virus disease risk in south-west	03/10/2011
Shellfish warning for the Peel-Harvey Estuary	27/10/2011
Ross River virus disease risk spreads in the south-west	03/11/2011
Widespread activity of mosquito-borne diseases in Western Australia	09/12/2011
Western Australians urged to take care against mosquito-borne viruses	19/12/2011
Tips to avoid a summer food bug	20/12/2011
Pool warning for summer Amoebic meningitis warning for West	10/01/2012
Australian recreational waterways	27/01/2012

Media Release Topic	Date of issue
Health warning for hot weather	23/01/2012
Mosquito-borne virus warning for regional WA	31/01/2012
Algal bloom warning for King George Sound, Albany and Mason Bay Harbour, Hopetoun	06/03/2012
Mosquito-borne disease threat continues across WA	20/03/2012
Grey nomads urged to plan ahead	03/04/2012
Potential health risks following storms	13/06/2012

Communication Strategy

We partnered with the Department's Communication Directorate to draft a communication strategy which identified a range of strategies to improve effective communication with all Environmental Health Directorate stakeholders; the need to improve consultation with stakeholders and to focus on high-risk emerging issues.

The strategy is being finalised and the Business Unit will progress internal communication issues, with the Science and Policy Unit coordinating external communication.

Seminars and workshops

We are committed to the professional development of the environmental health profession, and regularly host or present at a range of workshops, seminars and conferences.

Refer to page 63 for a list of some of the seminars and workshops we hosted or participated at during the year.

Snap shots

Mosquito Management Course We hosted a week long course on mosquito management to officers from various regions of WA, as well as the Northern Territory and New Zealand. The course was held in Mandurah, conveniently located near the mosquito breeding areas of the Peel Region.

The course involved presentations from numerous experts from our Directorate, the University of Sydney, the NT Department of Health and Families, and the UWA Arbovirus Surveillance and Research Laboratory. Officers from the City of Mandurah demonstrated the use of various pieces of equipment that are utilised in the City's mosquito management program.

Pesticide safety training

Staff helped to deliver 4 fumigation courses and 12 Unit 6 "Asset Maintenance Pest Management Course" to students new to the pesticide industry. Pesticide Safety delivers the health component of these courses, introducing students to their roles and responsibilities in the *Health (Pesticides) Regulations 2011* and increasing their understanding and the importance of ensuring public and health and safety. At the successful completion of these courses students apply to the Department for their licence either as a Technician with an endorsement of fumigation or as a Provisional Technician in urban pest management.

Another Pesticide Awareness Course was also provided to 20 employees of the Metropolitan Cemeteries Board at Karrakatta which was well received.



Mosquito Management participants learning about chemical control of mosquitoes from Mr Scott Severn from City of Mandurah.



Mosquito Management Course participants hearing about aerial larviciding from Heliwest Pilot Mr Leigh Wilkinson

Food Act and risk management, compliance and enforcement workshops

We hosted a number of workshops related to the Food Act including a risk management, compliance and enforcement workshop to discuss any concerns with the legislation and enhance tools and resources available.

Feedback included:

- *Great opportunity to network and exchange case studies*
- *Critical issues were discussed and the views of participants were gained in a non-threatening manner*
- *Very well prepared and presented workshop*
- *Well run. Refreshing way to present work through similar concerns.*



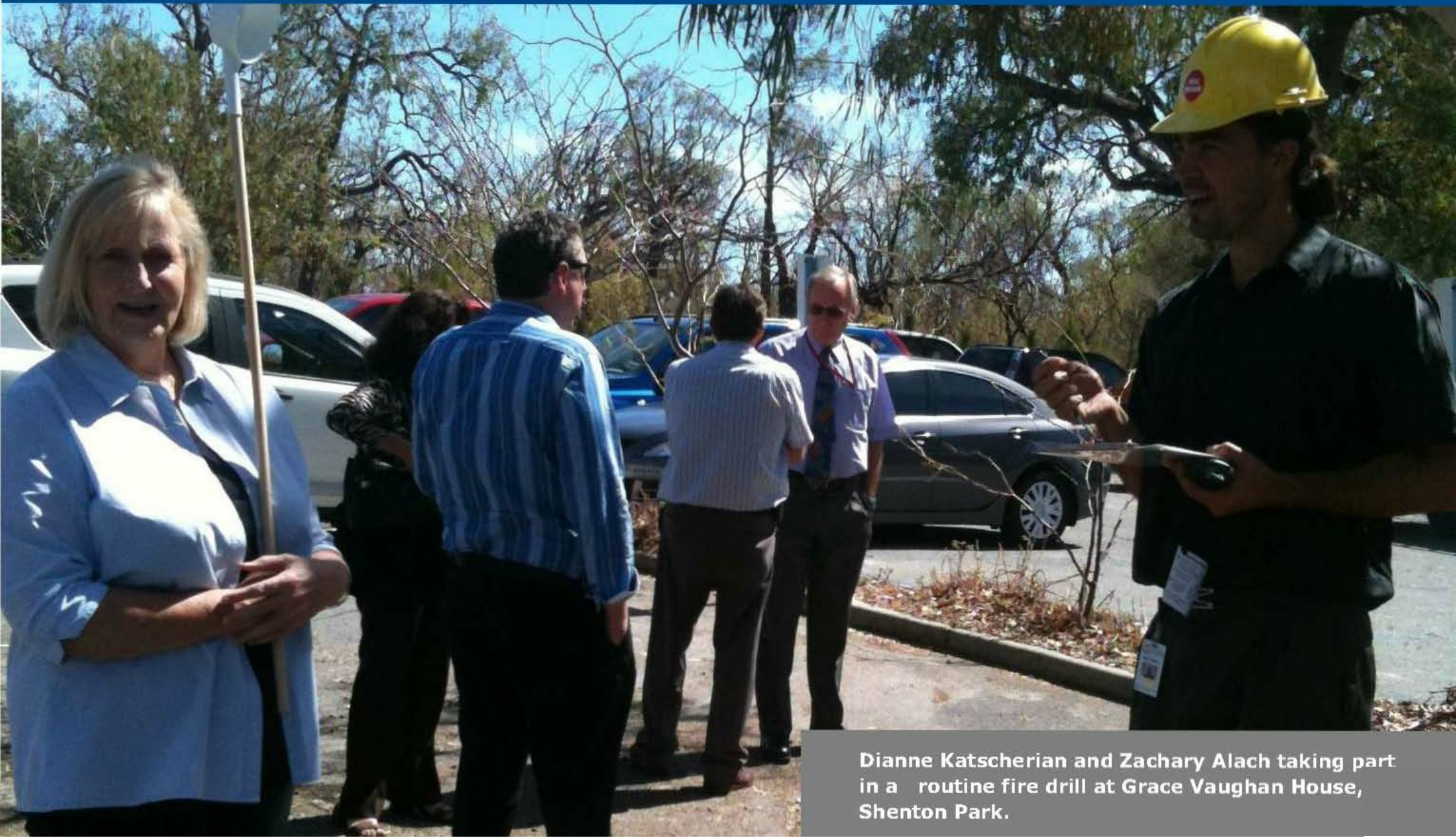
Group activities organised as part of the risk management, compliance and enforcement workshops



Participants who attended the onsite wastewater management course

Onsite Wastewater Management Training Course A three day Onsite Wastewater Management Training Course was organised with presenters from the eastern states. The course covered a wide range of environmental and geotechnical topics including on-site and decentralised wastewater management, erosion and sediment control, soil and water management and waste and landfill management. The course covered the *Australian Standard AS/NZS 1547:2000 On-site Domestic Wastewater Management* and the WA Guidelines. Everyone who attended found the course to be extremely informative and well run.

General business and our staff



Dianne Katscherian and Zachary Alach taking part in a routine fire drill at Grace Vaughan House, Shenton Park.

General business

Implement a new way of managing the budget The Business Unit prepared a budget template which provides up-to-date financial information to Management that enabled more efficient allocation of funds to each Unit. A monthly finance report is prepared and circulated to each Unit Manager and the Director. The monthly report is reviewed at each Executive Group meeting and has resulted in the Directorate managing its 2011-12 budget more effectively.

Upgrading Grace Vaughan House servers and wireless

The computer servers at Grace Vaughan House were in poor condition and there was a lack of secured wireless internet coverage for the site. A business case was submitted to HIN and funds have been allocated to complete both projects. Work on these projects have commenced.

Refurbishment of the Business Unit

We commenced a review of the business unit area and engaged contractors to design a workspace that better addressed the needs of the licensing, administration and compliance staff that occupy the space.

Staff and Unit Managers were involved in the design process and a design that best addressed the criteria was signed off. It is expected that the area will be refurbished before the next financial year.

Review of Business Unit Job Description Forms

During the last financial year Business Unit officers completed a review of Job Description Forms (JDF's) to address identified skill gaps within the area of administrative research. A review of existing JDF identified a significant change in the type of work, skills and knowledge required. New JDFs were created and approved by the Director General. The new JDFs have key responsibilities and will provide electronic file and data management support to the EHD to facilitate effective delivery of Directorate services. It will also undertake special research in the management of documents, other Environmental Health references and FOI requests.

Review revenue for licensing fees and cost recovery processes

The Business Unit commenced the review of payment options currently provided by the Directorate Managers have been advised of new online payment systems which, when implemented, will significantly enhance services offered to the Directorate's stakeholders.

Electronic document management and database integration project

We contracted Ignia Pty Ltd in September 2011 to develop documentation to assist with identifying the best technology solution to link into the database. The first document considered our business requirements and the second was a High-Level Functional Specification document which identified that we are well positioned to utilise the MS SharePoint platform recently purchased by the Department to achieve

its technology solution. Members of the project group met with the Health Information Network SharePoint team and Ignia consultants in order to move the project into the development phase. Development is expected to commence in the new financial year.

Occupational Safety and Health (OSH)

First aid training

The majority of staff have now completed Senior First Aid training. This has been a significant achievement, with over 80% of staff with these new skills. Despite this number far exceeding the required minimum number of first aiders, the Directorate accepted its mandated role with Public Health to be at the forefront of providing medical assistance if and when required – not only in the workplace, but also in the wider community or during emergency management type events.

OSH audit

A major review of our main offices, Grace Vaughan House and the Brockway Road facility, has been completed by OSH consultants 'The First Five Minutes.' The audit confirmed a number of issues, mainly minor, which require attention to ensure ongoing compliance with OSH legislation. In the meantime, we were pleased that we were provided with formal confirmation that we meet current OSH requirements.

OSH sub-committee

In order to implement deficiencies highlighted by the Consultants, a sub-committee has been established. The committee is composed of a representative from each Unit and has been meeting monthly to progress outstanding issues. These issues relate mainly to ensuring programs are put in place with respect to maintenance of fire fighting equipment, electrical cabling, trip hazards and exit strategies.

Reported injuries

We had no injuries/accidents/incidents reported by staff to the OSH representative. Despite this, work continues to ensure staff - and management - are aware of OSH reporting requirements.

Journal article writing course

A four day Scientific Writing Course was organised for eight staff who had collected publishable data. The workshop focused on creating the structure of a scientific article with participants finishing the workshop with many features of their articles completed.

We look forward to the successful publication of these eight articles in the near future.



Professional development policy

A Professional Development Policy was developed to outline the process for staff to access professional development courses and ensure equitable training opportunities for all employees. We also think it is important that any staff member who attends unique training presents an overview to fellow staff members. The policy will be communicated to staff during the coming year.

Contaminated sites funding to investigate our Pesticide Safety building

The Department was granted funding from the DEC through the *Contaminated Sites Act 2003*, to allow us to investigate the extent of pesticides and organic solvents contamination on our Pesticide Safety building in Mount Claremont.

Staff were able to see first-hand what a detailed site investigation and sampling program entailed, with the works undertaken by Golder and Associates.

Results from the extensive ground water, soil and building investigations showed no levels of contaminants present at levels of concern to human health. However, due to the nature of the storage areas and the continued use of the buildings for storage and mixing of chemicals, a Standard Operating Procedure was developed to minimise the risk of exposure of staff accessing the storage shed to low levels of dusts and odours.



Duncan Surin, Ling Lei, David Peckitt, John Howell and Julie Blanchard from the Directorate with Ivan Kwan (Golder) discussing the logistics of a contaminated site investigation.

Our staff

Duncan Surin in Washington DC

I was fortunate to be able to attend the Radiological Risk Assessment for Decision Making, Compliance and Emergency Response Course, held in Arlington, USA. Courses of this calibre are not usually available in Australia and it was attended by regulators and industry representatives from across the USA, Europe and Japan.



For me, the bonus was that this course was run in Crystal City, practically within walking distance from Washington DC. However the walk was elusive, so I quickly became familiar with the Metro system and could not avoid the opportunity to see the Capitol Building, the National Mall and associated monuments, a number of the Smithsonian Institute museums, Arlington Cemetery and of course the White House and Pentagon (albeit from a great distance).

Kelly Crossley, Masters in Health Science

I had wanted to undertake further study for some time, but it was only when I started working within the Environmental Health Directorate that I was able to achieve the work-life balance that made this possible. I applied for a \$5000 grant from the Department and undertook my Masters of Health Science with the University of Sydney. My studies covered the areas of medical physics, risk management, risk communication and radiation safety. Through my study I was able to further develop my research, writing and reporting skills, which led to direct benefits for clients. I thoroughly enjoyed my studies and graduated with a high distinction.

Bree Abbott, Masters in Public Health

I was approached by my previous Director turned University Research Associate Professor at UWA, Brian Devine, about doing my Masters of Public Health. I jumped at the chance and enrolled the following month. My research project involved the "Development of a risk assessment form for undertaking sanitary inspections for recreational waters", which was directly related to my field of work at the time. I valued the opportunity to develop my research skills and my article was published in the International Journal of Water and Health, which I was quite chuffed about. I actually think the best part was working with Brian. I couldn't have asked for a better supervisor. He was always there to guide me, red pen in hand! It was hugely rewarding when I finally handed in my 50 000 word thesis!

Alex Blackman, Aboriginal cadet program

As a cadet working in Aboriginal Environmental Health I have undertaken a wide range of tasks such as managing contracts with external agencies and programs delivered for Aboriginal communities. I was given opportunities to take part in courses to improve my skills in working for government. I travelled to the Pilbara and trained on-site in a dog health program, which was interesting and gave me a chance to meet some of the amazing people providing environmental health services to Aboriginal communities. My time with the Department has been fulfilling as it has provided me with new and valuable experiences in areas that will be essential in my future career.



Senior Toxicologist John Howell presented at the Johnson Asbestos Conference in Burlington, Vermont, USA. This conference is the premier international event on assessing and managing risks from asbestos, and only occurs every three years. John's presentation was well received and related to the Directorate's Guidelines on the management of asbestos contaminated soil, a document that is proposed for adoption throughout Australia. The conference was of a very high standard and at a wonderful venue in small town.

Natalia Shishkina, Masters of Environmental Health

As part of the Curtin University requirements to complete my Masters of Environmental Health degree, I conducted the study entitled

"Water Recycling in Western Australia. Analysis of 2003-2009 water quality monitoring program".

The study was completed with the Water Unit, at the Department of Health. This research helped me to gain a better understanding of the water industry and its regulatory environment which I am able to apply to my current job in the Water Unit. The study analysed

compliance of 92 water recycling schemes in WA over a seven-year period. As part of this work, I submitted a manuscript to the IWA Journal for peer review and presented it at the 66th Annual Western Australian Environmental Conference in March 2012.



Dianne Katscherian

The School of Public Health at Curtin University hosts a World Health Organisation (WHO) Collaborating Centre in Environmental Health Impact Assessment and my role in Health Impact Assessment (HIA) for the Directorate provided a good fit for close collaboration.

The WHO approached Curtin to participate in a Climate Change and HIA and Adaptation Project for the Pacific region, which was similar to the work I had already completed for the Directorate. I was privileged to participate in this 2- year project working with the Government and citizens of the Solomon Islands, Vanuatu and Nauru.

I was fortunate to be able to take annual leave to travel to these countries several times during this period. Each country has now completed Action Plans and the next stages require work with each to develop strategies for their implementation.

Additionally, the United Nations Framework Convention on Climate Change (UNFCCC), a group under the United Nations Environment Programme, invited me to participate in Vulnerability and Adaptation training programs for developing countries. My leave entitlements enabled me to travel to Kenya, to train participants from the Africa and Middle Eastern regions (53 countries) in the health component. The next regions are Central and South America followed by the Asian region during 2012.



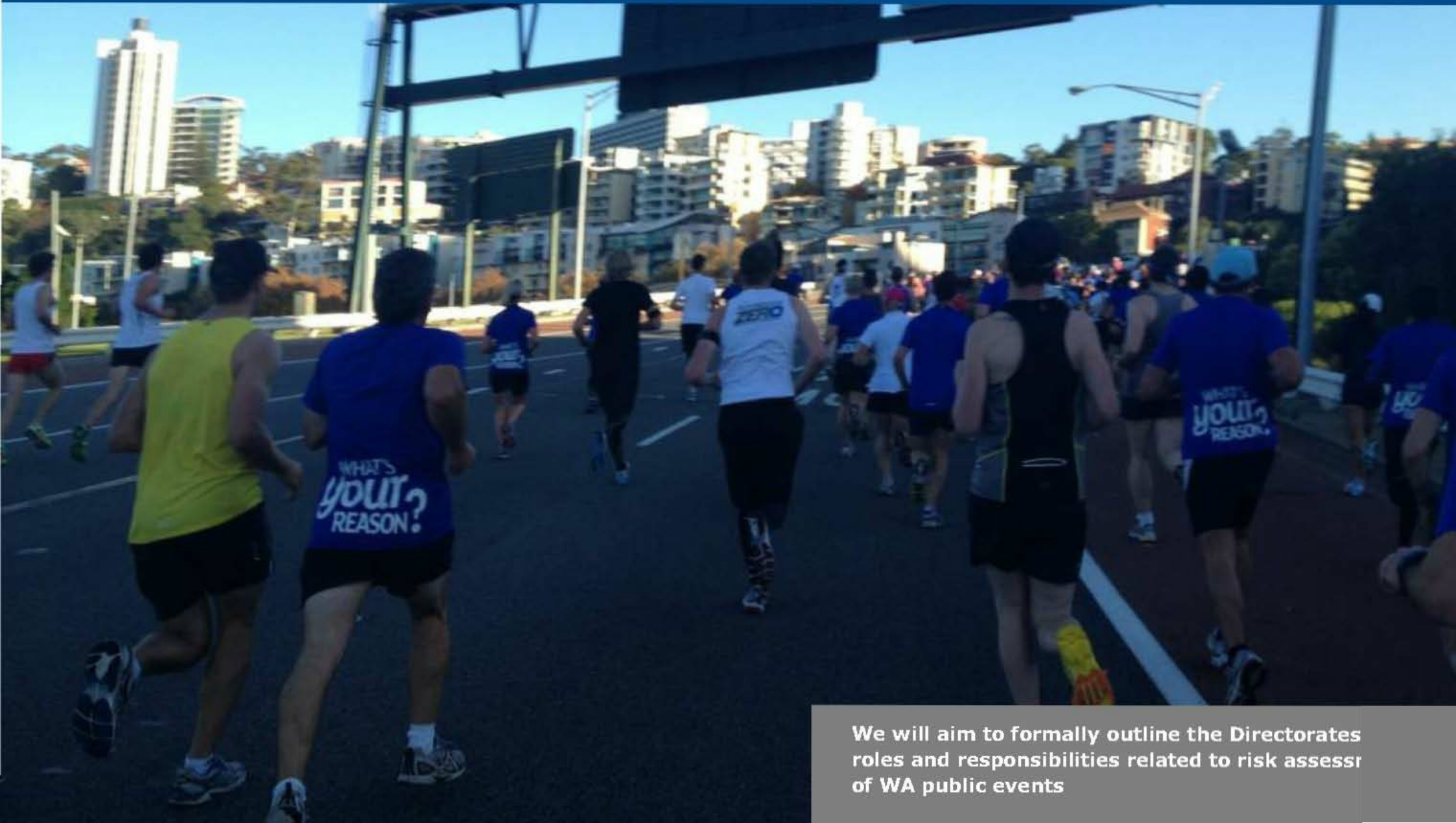
Dianne Katscherian (left) enjoying a meal in Nauru with Vincent from the Ministry of Health

Dr Clemencia Rodriguez

It has been a long but rewarding journey since I started my PhD in 2005 at the School of Population Health, UWA. My research was funded by the Department of Health, the leading agency of the Premiers Collaborative Research Program entitled "Characterising treated wastewater for drinking purposes following reverse osmosis treatment". Two of my supervisors Dr Paul Van Buynder and Mr Brian Devine worked in the Environmental Health Directorate and were very supportive during and after my research was completed.

Numerous research papers have since been published and working in the Water Unit has turned the research output into action through the implementation of the [Groundwater Replenishment Trial](#). The experience has been great. I encourage anyone interested in research, to enrich their professional skills and boost their work opportunities through a postgraduate experience.

This year's priorities



We will aim to formally outline the Directorates roles and responsibilities related to risk assessment of WA public events

We have a busy year ahead with a number of priorities we plan to complete.

Business Unit

Managing the financial, administrative, licensing and business functions of the Directorate.

1. Establish an ongoing monitoring and reporting system for budgets allocated to Unit special projects to ensure the projects milestones match financial commitments.
2. Review and report on administrative processes and skill requirements to ensure effective administrative support for the Directorates technical Units.
3. Develop a Business Continuity Plan (BCP) to manage severe disruption to services in the event of an emergency. The BCP will identify all resources necessary to continue crucial functions
4. Implement online payment facility for all licensing activities.

Environmental Health Hazards Unit

Minimising risks from environmental health

1. Complete the drafting instructions and Regulatory Impact Assessment for the review of the Health (Asbestos) regulations.
2. Plan for and provide financial support to develop online public education material on the appropriate handling, removal and disposal of asbestos cement materials.
3. Develop a risk assessment and guidance package on vector-borne disease, nuisance mosquitoes and land use planning for decision making agencies and developers.
4. Review Ross River virus disease risk to inform land-use planning across WA.
5. Finalise and implement guideline and supporting resources for managing health aspects of clandestine drug laboratories in partnership with the DEC.
6. Finalise roles, responsibilities and standard operating procedure for EHD risk assessment of public events and update supporting material including events guidelines.
7. Develop guidelines to be used to measure the quantity of mould in public building ventilation systems.

Food Unit

Identifying and managing food safety supply risks.

1. Implement the Strategic Plan 2012 – 2014 in preparation of the review of the Act
2. Develop a framework for risk management, compliance and enforcement for the Food Act: We will develop risk management, compliance and enforcement outcomes for the Food Act which will ensure a consistent approach to the enforcement of the legislation across WA food establishments.
3. Develop a framework for the review of
 - The *Food Regulations 2009* and
 - The *Food Act 2008*
4. Enhance the Quality Management System to streamline new and existing processes under the *Food Act 2008*

Radiation Health Unit

Minimising exposure of the population to harmful radiation.

1. Commission all laboratory equipment for the new Radiation Health Unit laboratory once the building is completed.
2. Develop new radioactive waste acceptance protocols and working protocols for the new Radiation Transit store on the QEII site.
3. Review the adequacy of training and assessment for x-ray operators on behalf of the Radiological Council.

Science and Policy Unit

Coordinating across Directorate projects, policy and innovations.

1. Draft supporting guidelines outlined within the 'Public Health Bill Implementation Plan' to assist local government enforcement agencies to interpret the Bill.
2. Review, update and communicate the Environmental Health Directorate disaster response processes.
3. Review and update the retail premises inspection programs for tobacco retailers.
4. Develop and commence implementation of a tobacco compliance education strategy.
5. Support each of the four regional forums in the Kimberley, Pilbara, Mid West and Goldfields to plan regional programs and link them into regional Aboriginal Health Planning Forums
6. Measure and report on regional aboriginal environmental health services and activities funded by our department and determine their effectiveness in improving public health
7. Conduct a training course on responding to public health emergency management issues in the East

Science and Policy Unit *Coordinating across Directorate projects, policy and innovations.*

8. Draft an options paper for discussion on a 'Collaboration Agreement' between EHD, Public Health Units and Local Government to clarify roles and responsibilities for the administration of public health.
9. Prepare a business case outlining the feasibility and costing for conducting ongoing local government EHO disaster response training.

Water Unit *Minimising exposure to risks associated with water.*

1. Complete and publish the Code of Practice for Onsite Wastewater Management in Western Australia.
2. Revise and republish the Code of Practice for Greywater systems.
3. Complete final report of the Beenyup Groundwater Replenishment Trial.
4. Publish the draft algal bloom response protocol for interagency adoption.
5. Complete the Government Sewerage Policy.

6. Revise and endorse the Memorandum of Understanding between the Water Corporation and Department of Health for the Full Operation of the Groundwater Replenishment System.
7. Prepare and endorse Memorandum of Understanding between the Water Corporation and Department of Health for Drinking Water Services.
8. Prepare and endorse Memorandum of Understanding between the Water Corporation and Department of Health for Wastewater Services.
9. Complete an audit of the Water Corporation.

Looking ahead



Dr Peter Neville, Senior Scientific Officer and Mr Jay Nicholson (UWA) setting up a mosquito trap in the Kimberley.

Looking ahead

We have identified a number of high priority projects for completion in the coming year. These projects aim to minimise environmental health risks to the WA community and will improve the way we do business.

Develop a framework for risk management, compliance and enforcement for the Food Act

We will develop risk management, compliance and enforcement outcomes for the Food Act which will ensure a consistent approach to the enforcement of the legislation across WA food establishments.

Develop clandestine drug laboratories resources

We will develop and implement a guideline and supporting resources for managing health aspects of clandestine drug laboratories in partnership with the Department of Environment & Conservation.

Review and update the Environmental Health Directorate disaster response processes

Our Directorate requires an updated plan to outlined how we respond to critical disaster events across the state.

Complete final report of the Beenyup Groundwater Replenishment Trial

Complete and publish the Code of Practice for Onsite Wastewater Management in Western Australia

Financials



We will be partnering with the Cancer Council of WA to develop public education programs for the appropriate removal and disposal of asbestos cement materials for home handymen (DIY'ers)

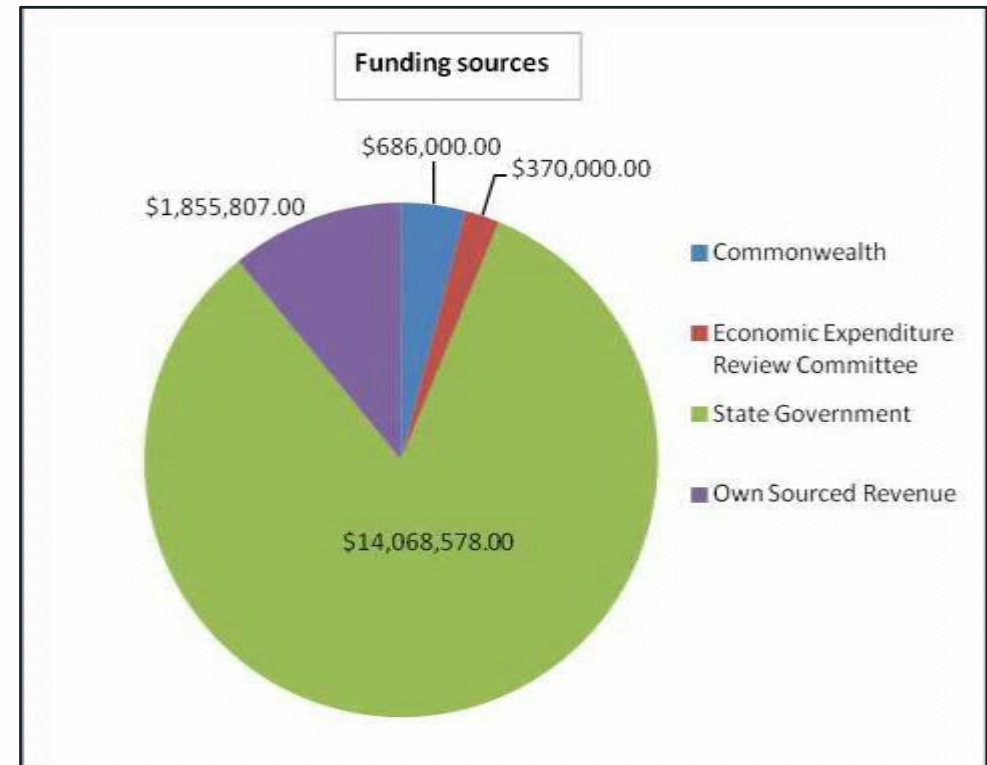
The annual budget for 2011-12 was \$17.6 million.

Financial highlights for 2011-2012

- EHHU spent \$548,574 on environmental surveillance programs in WA.
- EHHU spent \$510,397 on mosquito management programs and on funding assistance to local governments for local mosquito control programs under the Contiguous Local Authorities Group funding program.
- EHHU provided \$135,000 for applied research grants.
- Food Unit spent \$212,400 to implement surveys to estimate the levels of pesticide residues in fruit and vegetables produced and sold on the domestic market.
- Food Unit contributed \$26,247 to the National Food Regulatory system.
- \$30,815 contribution by Food Unit to the Food Standard Australia New Zealand.
- SPU spent \$101,713 on regulatory impact assessment for the new Public Health Bill.
- Provided \$5.8 million to various organisations for the provision of Environmental Health Services in Aboriginal communities

Where our funding came from

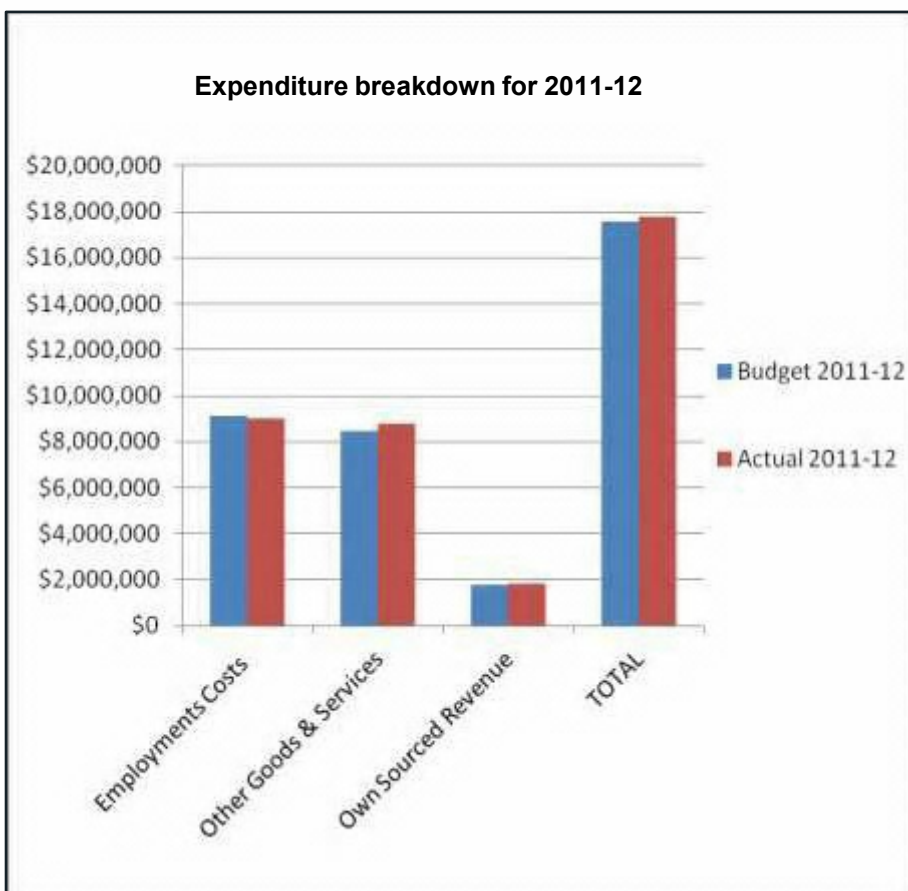
Funding is generated through a number of sources, with majority of our budget allocated by the State Government.



Expenditure breakdown

The Directorate's annual budget for 2011-12 was \$17.6 million out of which \$9.1 million was for the Employments Costs and remaining \$8.5 million for the other goods and services. Total actual expenditure for 2011-12 was \$17.7 million which was around 1% variance against budget allocation.

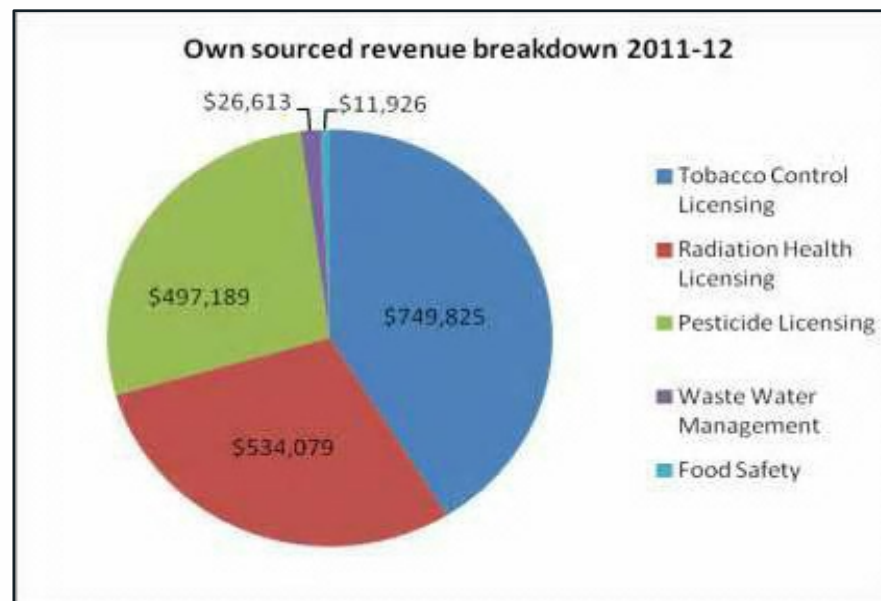
Salaries, wages and staffing costs accounted for more than half (51%) of total expenditure. Remaining expenditure (49%) covered various other costs and programs including Environmental Health Services in Aboriginal communities; environmental surveillance & mosquito management in WA. The Other Goods & Services costs also included operational expenses and building maintenance expenditure.



Own sourced revenue

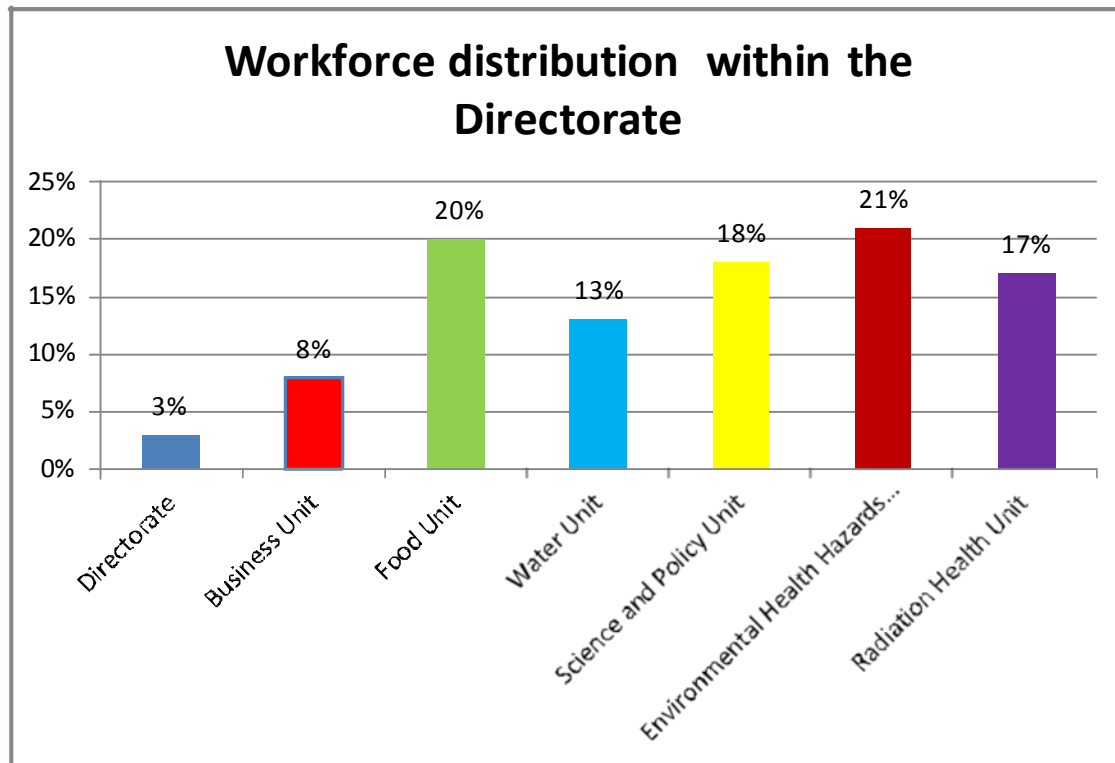
We generate income through a range of legislative licensing and compliance requirements. This income funds ongoing activities in these areas, as well as the employment of staff to run the legislative inspection, auditing and awareness raising programs.

In 2011-12, the Directorate’s different licensing units collected \$1.82 million in revenue. Tobacco Licensing was the highest contributor (41%) followed by Radiation Licensing (29%) and Pesticide Licensing (27%). Revenue generated by Tobacco Licensing was used for the review of Tobacco Act and for the conduct of a tobacco retailer compliance survey in metropolitan Western Australia. It also paid for the Tobacco Quit Line program expense.



Workforce distribution (percentage) in the Environmental Health Directorate

We employ of total of 94 full time equivalents.



Professional development activities (seminars, workshops and awareness raising)

Date	Topic
July	
19/07/2011	WA regulatory food safety auditing framework workshop
15/07/2011	WA Food Regulation presentation to Midwest
August	
3/8/2012	Public buildings – Kimberley EHOs
10-11/08/2011	Radiation Oncology Reform Implementation Committee National Seminar
09/08/2011 26/08/2011	Food safety presentations
29/08 – 1/09/2011	X-ray Operator Course
31/8/2011	Asbestos workshop
September	
1/09/2011	Aquatics VET course
5-9/9/2011	Mosquito management course
12/9/2011	Indoor Air Quality lecture -Murdoch Uni
October	
20/10/2011	Asbestos Symposium
10/10/2011	Food poisoning outbreak presentation
12/10/2011	Auditing meals on wheels presentation

Date	Topic
November	
21-25/11/2011	Risk assessment and management
7-10/11/2011	X-ray Operator Course
8/11/2011	Radiation Advice and Solutions, Theory and practice of radiation safety in uranium, mineral sands and rare earths mining and processing and NORM management course
December	
5/12/2011	Asbestos workshop
01/12/2011	Food Act planning workshop
06/12/2011	Food Act planning workshop
January	
11/1/2012	Presented at the ACLCA meeting
12/01/2012	Food Act planning workshop
27/02/2012	Food Act planning workshop
30/1/2012	GLAG funding training
February	
5/2/2012	Public events and buildings – EHO students
20/2/2012	Aquatics workshop – VET course
20-23/2/2012	X-ray Operator Course

continued

Date	Topic
March	
15/3/2012	Presented at the Air quality forum
29/3/2012	Presented at EHA (WA) state conference
30/3/2012	CLAG funding training
29-30/3/2012	Presented at the Environmental Health conference
April	
12/4/2012	Industry liaison committee
20/4/2012	Public buildings – EHO students
24/4/2012	CLAG funding training
27/4/2012	Public events – EHO students
May	
1/5/2012	Aquatics workshop
14/5/2012	CLAG funding training
14-18/5/2012	X-ray Operator Course
15/5/2012	Tutorial presented for the Radiation Protection and Biology Unit of the UWA MSc in Medical Physics.
22/5/2012	FESA CBRN Emergency Response Course
29/5/2012	Presented at the Kimberley Population Health Conference
14/5/2012	HAZE workshop

Date	Topic
June	
1/6/2012	Aquatics VET course
8/6/2012	Clan Lab workshop
14/6/2012	CLAG funding training
19-20/06/2012 21-22/06/2012	Risk management, compliance and enforcement workshops



Glossary

CDCD	Communicable Disease Control Directorate
CLAG	Contiguous Local Authorities Groups
DEC	Department of Environment and Conservation
Department or DOH	Department of Health
Directorate or EHD Directorate	Environmental Health Directorate
EHHU	Environmental Health Hazards Unit
EHO	Environmental Health Officer
EHP Practitioner	Environmental Health Practitioner
GIS System	Geographical Information System
GVH	Grace Vaughan House

WACHS	Western Australian Country Health Services
WALGA	Western Australian Local Government Association
WHO	World Health Organization

Acknowledgements

A big thank you goes out to all staff within the Environmental Health Directorate for working together to make sure we could produce our second Year Book.

A special thank you goes out to the Year Book team including:

Bree Abbott	Lindsay Gillam
Willow Warren	Cherine Glasson
Sasha McGrath	Danielle Phillippe
Manoj Agarwal	Jennifer Sullivan
Rebecca Delsar	Tu-Trinh Tran
Duncan Surin	Marta Berzins
Mirella Goetzmann	



Delivering a **Healthy WA**

